

ACTreatment Facility Operations Manual

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Advanced Chemical Treatment

Albuquerque, NM 87107
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ACTreatment Facility Operations Manual

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Facility SOP 1 - Facility Overview

1.1. Policy

It is ACTreatment policy that no job is so important that we cannot take time to perform our work safely and in an environmentally conscientious manner. ACTreatment personnel must implement the applicable provisions of this document to ensure that employee safety is kept as a top priority.

1.2. Purpose

This manual is intended to provide guidance and instruction concerning ACTreatment operations. It is the responsibility of ACTreatment personnel to adhere to the guidelines presented in this manual.

1.3. Facility Description

Advanced Chemical Treatment, Inc. (ACTreatment) is located at 6137 Edith Boulevard N.E., Albuquerque, NM 87107 in Bernalillo County (EPA ID# NMD002208627). ACTreatment manages a treatment, storage and disposal facility for hazardous waste products and also acts as the City of Albuquerque's household hazardous waste collection depot. Services include:

- Solid waste consolidation
- Liquid waste consolidation
- Lab pack chemical consolidation
- Universal/ E-Waste consolidation
- Household hazardous waste management
- Empty drum crushing

Wastes are sent for further recycling, incineration, landfill, wastewater treatment, transport, and/or disposal at a permitted TSDF.

1.4. Responsibilities

1.4.1. Executive Management –

Executive management has the ultimate responsibility for the implementation of this program at ACTreatment. Executive management has assigned responsibilities to the following individuals in order to implement and maintain this program.

1.4.2. General Manager

The General Manager will ensure that all elements of this plan are implemented and maintained.

1.4.3. TSDF Operations Manager

The TSDF Operations Manager is responsible for the following:

- Provide program oversight;
- Ensure that no employees perform work outlined in this program without proper training;
- Coordinate and supervise required recordkeeping;
- Provide training for each employee as required;
- Complete a periodic evaluation of overall program; and

- Coordinate required changes/improvements in the program.

1.4.4. Hazardous Waste Coordinator (HWC)

The Hazardous Waste Coordinator (HWC) coordinates waste consolidation and other waste management activities, including the following:

- Determining individual waste containers to be consolidated, based on waste profile and characteristics
- Modifying or updating list of containers identified for consolidation.
- Reconciling consolidated containers in the WMSS in order to maintain an accurate facility inventory

1.4.5. Employees

Employees are responsible for the following:

- Follow the procedures as outlined in this program; and
- If any questions arise or you are unsure about performing any activity outlined in this program, contact the TSDF Operations Manager.

1.5. Operational Manual Organization

This Facility Operations Manual consists of:

- Facility SOPs – Standard Operation Procedures (SOPs) that apply across the facility and describe standard practices for general operations
- Waste-specific SOPs – SOPs for specific types or categories of hazardous wastes
- Waste Analysis Plan (WAP)

1.6. Updates and modification of ACTreatment Facility Operations Manual

This document will be modified or updated to address changes to applicable regulatory requirements, changes to business activities or otherwise as needed. All changes will be approved by ACTreatment Facility Manager and recorded in the document change log. The official version of this document will be maintained on ACT web site. Please refer to on-line version before placing reliance on printed versions.

Facility SOP 2 - ACTreatment Employee Training

The primary objective of the facility's training program is to instruct employees in the practices, procedures and rules regarding safe operation in accordance with applicable State and Federal regulations. The training program requires training in safety, proper transport and response to hazardous waste emergencies. These classes are conducted in-house by an employee trained in hazardous waste management procedures and/or outside training providers. The instruction is in the form of classroom instruction and on-the-job training.

All new employees who manage hazardous waste shall complete the initial training courses within six months from their date of hire or from the date of transfer of job assignment. Personnel shall not work unsupervised in their positions until they have completed the training. Annually, all personnel who manage hazardous waste must participate in a minimum of eight hours of refresher/review of the initial training.

All TSD employees will receive initial OSHA HAZWOPER training as required under subpart (p) and subpart (q) of 29 CFR 1910.120 and annual refresher training, as described below, as well as DOT hazardous materials transport training. Courses which satisfy all or part of the training include, but are not limited to:

- Initial Facility Orientation
- OSHA HAZWOPER Hazardous Material Technician (29 CFR 1910.120(q)(6))
- OSHA HAZWOPER TSD Worker (29 CFR 1910.120(p)(7))
- OSHA 8-hr HAZWOPER Refresher
- DOT Hazardous Materials Transportation Training

The training shall consist of lectures, discussions, examinations and on-the-job training.

2.1. Initial Facility Orientation Course Contents

- Discussion of Emergency Preparedness Plan for the Facility
- Hazard Identification and Discussion
- Storage and Segregation
- Contingency Plan and Emergency Procedures
- Facility Tour
- Identify Safety Features
- Identify Communications and Alarm Systems
- Discuss Evacuation Routes
- Standard Operating Procedures
- Review of Procedures to Perform Operations at Facility
- Safety Practices

2.2. OSHA HAZWOPER Hazardous Materials Technician/TSD Worker Course Contents

- Emergency Response to Hazardous Materials Incidents,
- Characteristics of Hazardous Wastes/Materials,
- Information Resources
- Identification of Hazardous Waste
- Levels of Protection

- Chemical Protective Clothing
- Response Operations: Safety Plans and Standard Operating Procedures
- Response Operations: Size-up
- Response Operations: Strategy and Tactics
- Site Entry
- Incident Control: Confinement and Containment
- Direct-Reading Instruments
- Response Organization/Incident Command
- Level A Demonstration
- Decontamination
- Establish Incident Command for Transportation Incident
- Organize for Transportation Incident
- The training shall consist of lectures, discussions, exercises and examinations.

2.3. OSHA 8-Hour Refresher Course Contents

- Hazardous Waste Management and Regulations
- Source of Information
- Compatibility of Hazardous Wastes
- Personal Protection
- Principles of Safety
- Emergency Procedures

2.4. DOT Hazardous Materials Transportation Training Course Contents

- General Awareness/Familiarization
- Identification of Hazardous Materials
- Packaging
- Marking
- Labeling
- Shipping Papers
- Placarding
- Separation and Segregation
- Safety
- Hazardous Waste Transportation Issues

2.5. Training Records

The following records will be maintained at the facility:

- The job title for each position related to hazardous waste management and the name of the employee filling each job
- A written job description for each position
- A written description of the type and amount of initial and refresher training for each position
- Training records on current employees will be kept until closure of the facility and training records on former employees will be kept for at least three years from the date the employee last worked.

Facility SOP 3 - Contractors and Contractor Training

- When ACTreatment arranges to have employees of another employer (Contractors) perform work that involves activities that may put personnel at risk, ACTreatment must inform the Contractor that the workplace contains specific hazards and that the work to be done is permitted only if all workers have the proper training, equipment and work conditions to accomplish the task(s) in a safe manner.
- Contractors are required to understand and to comply with the policies and procedures stated in this manual, as well as, all regulations pertaining to their operations.
- The supervisor of the contractor must complete a *Contractor Training Checklist* (below) for each contractor to work on-site. This supervisor must use this checklist to determine the training requirements for the contractor working on-site.



ACTreatment Contractor Safety Checklist

Contractor Name: _____ **Agency / Company Name** _____
Contact Name & Information: _____
Anticipated Date of Hire: _____ **Position:** _____
Description of Job Duties: _____
Duration of Employment: _____

I certify that this employee is approved to work (Compliance Director): _____

Attach documentation of all completed courses to this document and submit to the Compliance Director for approval.

EH&S Training Requirements	Job Tasks	Date Completed
40 Hour HAZWOPER or 8-Hr Refresher Certificate – <i>must have current certificate within one year of date</i>	Handling hazardous materials, wastes, decontamination tasks, bulking, etc.	
DOT Training Certificate – <i>must have current certificate within 3 years of date</i>	Packaging waste for transportation, labeling containers or completing the paperwork	
Hazard Communication	Handling hazardous materials	
Hazardous Waste Awareness – <i>must have current certificate within one year of date</i>	Handling hazardous wastes	
Respiratory Protection – <i>must have current certificate within one year of date</i>	Contractors issued/using a respirator	
*Other:	Job Specific	
	Job Specific	

* Examples include, HHW, TSDF Orientation, etc.

Medical / Drug Testing & DOT Requirements	Personnel	Date Completed
HAZWOPER Physical	Handling hazardous materials, wastes, decontamination tasks, bulking, etc.	
DOT Physical	DOT Drivers	
*Drug Test	All	
Pulmonary Function Test	Contractors issued/using a respirator	
Respirator Fit Test	Contractors issued/using a respirator	

* If an employee is needed within 48 hours a drug screen is not required at the time of approval. If they will be working more than 16 hours, a drug screen is required within two business days.

Facility SOP 4 - Receiving of Waste Shipments

4.1. Weigh Containers

4.1.1. Zero Scale

- 1) Zeroing the scale resets the scale in order to get an accurate weight.
- 2) Zero the scale by making sure that there is no weight on the scale and pressing the button on the scale that is labeled "Zero".
- 3) Wait for the display to stabilize and the scale is ready to weigh.

4.1.2. Place Container on Scale

- 1) Use a forklift to place the waste container on the scale.
- 2) Raise the load high enough to avoid bumping the scale sides when moving the load over the scale. This can cause damage or inaccuracy in the scale.
- 3) Set the load down slowly and carefully to avoid jarring the scale.

4.1.3. Record the weight

- 1) Allow the display weight to stabilize before recording the weight.
- 2) Record the weight on the QC form and the Inventory label.

4.2. Perform QC Check

4.2.1. Open the Container

- 1) The container must be opened to inspect the waste material.
- 2) Always open containers carefully and wear the appropriate personal protective equipment.
- 3) Waste containers may be under pressure, keep face away from container opening.

4.2.2. Inspect the Waste

- 1) Carefully inspect the waste per the parameters outlined in the appropriate waste management SOP. Avoid touching the waste and wear appropriate personal protective equipment. Level D for Solids, Level C for liquids.

4.2.3. Sample the Waste (when required)

- 1) Follow the appropriate Waste Management SOP to determine if a sample and additional analysis is required for a particular waste.
- 2) For wastes that need to be sampled, use a drum thief, COLIWASA or other sampling tool to retrieve the waste from the container. Never use your hands to sample waste.

4.2.4. Record the QC results

- 1) Record the QC results on the QC form and initial to identify who performed the QC check.
- 2) Note any discrepancies on the QC form and notify the Inbound Coordinator of the discrepancy.

4.3. Waste Storage

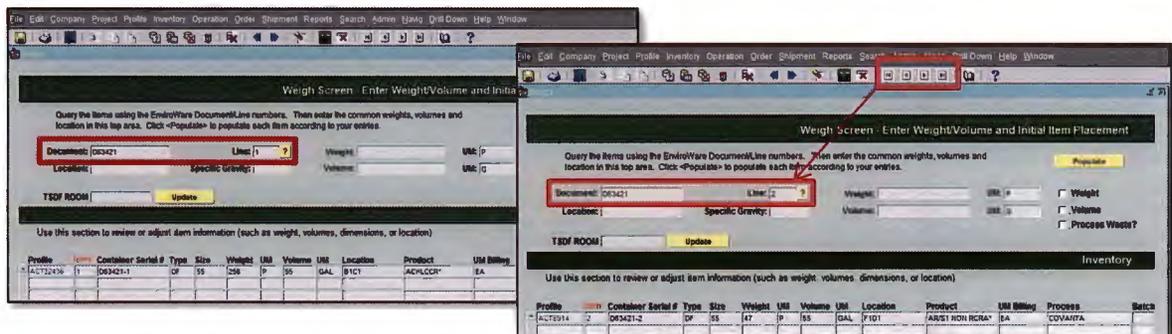
- In general wastes will be stored in the appropriate room in the warehouse based on the DOT shipping hazard class of the waste, as described in **Facility SOP 8 - Trailer doors must be locked** after hours while docked or staged and at all times during transportation, in accordance with applicable DOT regulations.
- Hazardous Materials/Waste Storage Requirements.
- Specific storage requirements for individual types of hazardous wastes are addressed in the waste category SOPs

4.4. Records Update

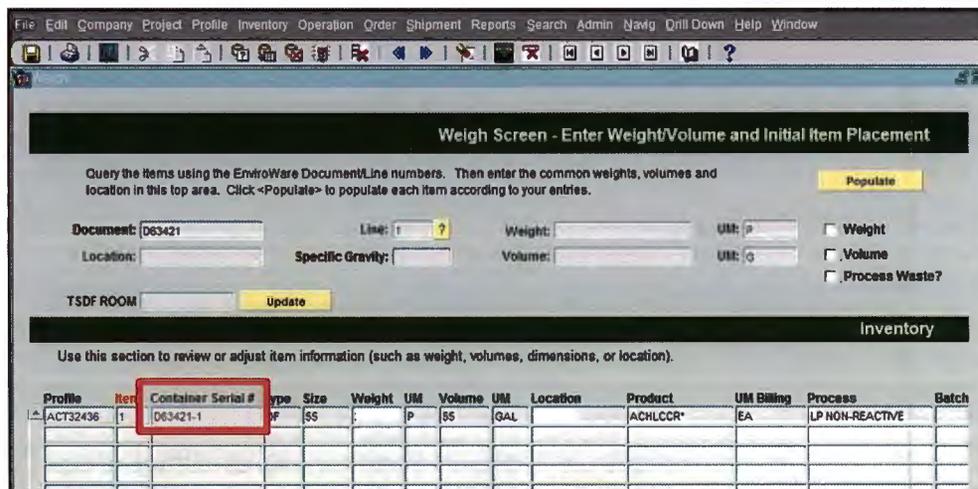
4.4.1. Records of wastes received at the facility, current inventory, wastes being shipped and similar records will be maintained in a waste-management software system (the WMSS). ACTreatment currently uses "Enviroware" software from Contemporary Software as its WMSS. Examples and specific references below are for the "Enviroware" software. ("E-ware") The information in this document will be updated as needed if a different WMSS is used.

4.4.2. Weigh Screen

- 1) From the Weigh Screen, search the document number associated with the manifest that is being received in the *Document* field. The Weigh screen will display the number of items per manifest line number (each manifest line will be a different page in this screen, use the record navigation buttons at the top of the screen to move from line to line).



number in sequence with a dash (D63421-1) in the *Container Serial #* field.



3) Enter the corrected weight from the QC form of the waste container in the *Weight* field.

The screenshot shows the 'Weigh Screen - Enter Weight/Volume and Initial Item Placement' window. At the top, there are input fields for Document (063421), Line (1), Weight, UOM (P), Location, Specific Gravity, Volume, and UOM (G). Below these is an 'Update' button. The main area is an 'Inventory' table with the following data row highlighted:

Profile	Item	Container Serial #	Type	Size	Weight	UOM	Volume	UOM	Location	Product	UOM Billing	Process	Batch
ACT2436	1	063421-1	DF	55	256	P	55	QAL	B1C1	ACHLCCR	EA	LP NON-REACTIVE	

4) Enter the storage location from the QC form in the *Location* field. Adjust locations in the Move Screen if necessary.

The screenshot shows the 'Weigh Screen' window with the 'Location' field in the inventory table highlighted. The data row is:

Profile	Item	Container Serial #	Type	Size	Weight	UOM	Volume	UOM	Location	Product	UOM Billing	Process	Batch
ACT2436	1	063421-1	DF	55	256	P	55	QAL	B1C1	ACHLCCR	EA	LP NON-REACTIVE	

5) Use the QC form to double check the size and type of container in the corresponding fields. Correct if necessary.

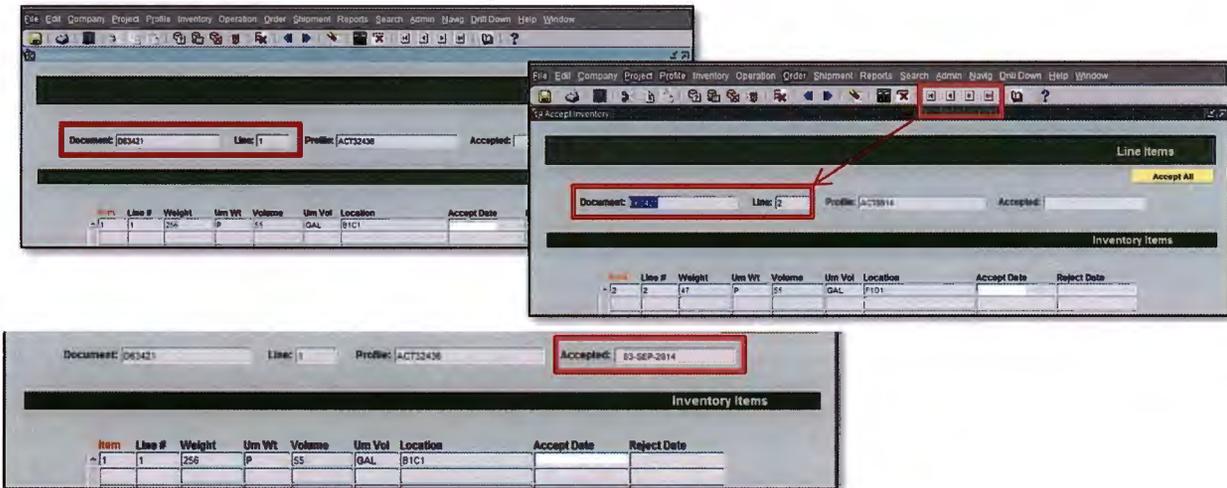
The screenshot shows the 'Weigh Screen' window with the 'Type' and 'Size' fields in the inventory table highlighted. The data row is:

Profile	Item	Container Serial #	Type	Size	Weight	UOM	Volume	UOM	Location	Product	UOM Billing	Process	Batch
ACT2436	1	063421-1	DF	55	256	P	55	QAL	B1C1	ACHLCCR	EA	LP NON-REACTIVE	

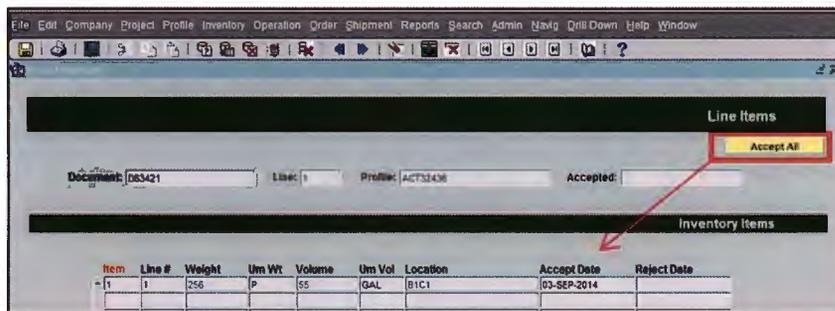
4.4.3. Accept Screen

1) Accept Waste

From the Accept Inventory screen, search the document number associated with the manifest that is being received in the Document field. The Accept Inventory screen will display the number of items per manifest line number (each manifest line will be a different page in this screen, use the record navigation buttons at the top of the screen to move from line to line).



2) Click on the Accept All button to populate the *Accepted Date* field. This will populate the date for all records associated with the Document number.



4.4.4. Discrepancies

1) The Inbound Coordinator will notify the generator / generator representative of the discrepancy and will either:

- Determine alternate routing of the waste
- Return the waste to the generator

Facility SOP 5 - Uniform Hazardous Waste Manifest Management

5.1. Regulatory Requirements

- 5.1.1. During receiving of hazardous waste, Manifest must undergo QC inspection to confirm that:
- 1) Generator information is correct
 - 2) Transporter information is correct
 - 3) The DOT Shipping Name, container descriptions and RCRA waste codes are correct
 - 4) Quantities are correct
 - 5) Generator certification is correct and readable (the date and date format is also correct)
 - 6) Transporter Acknowledgement is correct and readable (the date and date format is also correct)
 - 7) The Hazardous Waste Management codes are noted for each RCRA Hazardous Waste
 - 8) The Designated Facility Operator Certification is complete and readable

5.2. Inspection Steps

- 5.2.1. All RCRA hazardous waste shipments must be documented on a Uniform Hazardous Waste Manifest
- 1) The Uniform Hazardous Waste Manifest is normally accompanied by a Land Disposal Restriction Notification Form, unless special conditions exist.
 - 2) All printing on the Uniform Hazardous Waste Manifest must be legible
 - 3) Changes on a Uniform Hazardous Waste Manifest must be done by making a single line and initial with the new information written above or below.
- 5.2.2. Section 1 - Generator ID number must be printed on the manifest
- 1) 12 space alphanumeric EPA Id number or
 - 2) CESQG designation
- 5.2.3. Section 2 – Number of pages on document is complete
- 5.2.4. Section 3 – Emergency Response Phone must be completed
- 5.2.5. Section 4 – Manifest Tracking Number is included (this is normally pre-printed)
- 5.2.6. Section 5 – Generator Name and Mailing Address is complete
- 1) This section shall also include the Generators Phone number
- 5.2.7. Section 6 – Transporter 1 Company Name and USEPA ID Number is complete
- 5.2.8. Section 7 – Transporter 2 Company Name and USEPA ID Number is complete (if applicable)
- 1) Applicable only when the custody of the waste is transferred between company entities. Transferring between different employees within the same company does not require additional transporter identification.

- 5.2.9. Section 8 – Designated Facility Name and Site Address is complete with 12 digit EPAID number and phone number
- 5.2.10. Section 9 – US DOT shipping description including 9a and 9b is completed and correct.
- 5.2.11. Section 10, 11 and 12 – For each line item, the container number / type, quantity weight and Units are correct
 - 1) The actual quantities and weights will be noted on the QC Forms which accompany the manifest to this Manifest QC inspection Process
- 5.2.12. Section 13 – All applicable Waste Codes are filled out correctly
- 5.2.13. Section 14 – Special Handling and Additional Information may contain additional descriptions for the hazardous waste in this section.
 - 1) The ERG number for the waste is required
- 5.2.14. Section 15 – Generators / Offerors Certification must be filled out including printed name, signature and date
- 5.2.15. Section 16 – International Shipments completed when applicable
- 5.2.16. Section 17 – Transporter Acknowledgement of Receipt of Materials is completed include print sign and date.
- 5.2.17. Section 18a – Discrepancies regarding quantities, types, residues, rejections are noted in this section when applicable.
- 5.2.18. Section 18b – Alternate Facilities or Generator shipments are noted in this section
- 5.2.19. Section 18c – Signature of Alternate Facilities or Generators and date accepted when applicable.
- 5.2.20. Section 19 – Applicable Hazardous Waste Management Codes are noted per manifest line item in this section.
- 5.2.21. Section 20 – The Designated Facility Owner or Operator must have the name, signature and date of the person accepting the waste.

5.3. Discrepancy Management

- 5.3.1. Discrepancies on manifest, when discovered will be immediately investigated. Documentation of the discrepancy and resolution (when required) will be filed within the shipment file.
- 5.3.2. Discrepancies must be reported to the Generator within 15 days of receipt of the Waste.
- 5.3.3. The Generator must be informed in writing of the discrepancy and resolution, if required.
- 5.3.4. Rejections when discovered will be immediately investigated and documentation of the resolution, including all associated manifests and other communications will be filed within the original outbound shipment file.

5.4. Good Documentation Practices

- 5.4.1. All handwritten parts must be legible, and in blue or black ink.
- 5.4.2. Any changes must be made by crossing out with a single line, initial and write the correct information above or below the correction.
 - 1) Rule of Thumb – the original mistake must be visible after the correction.
 - 2) Scratch outs are not allowed.

5.5. Manifest Recordkeeping and Retention

5.5.1. Regulatory Requirements

- The record retention policy is driven by applicable federal, state, and local regulatory requirements. These requirements are followed in order to maintain compliance with these regulatory standards and to provide adequate documentation for the TSD business. The following basic requirements must be met for Hazardous Waste Manifest record retention:
- Each shipment file will contain the required manifest copies and other TSD permit required documentation.
- Each manifest is retained for a period of three years.
- Each manifest has a copy of the applicable LDR form attached.
- Each inbound manifest will have the “DESIGNATED FACILITY TO GENERATOR” copy mailed to the generator within 35 days.
- Each outbound manifest will have the “DESIGNATED FACILITY TO GENERATOR” copy attached to the “GENERATORS INITIAL COPY” or will have attached a record of the attempt to locate the “DESIGNATED FACILITY TO GENERATOR” copy of the manifest.

5.5.2. Inbound Manifests

- Once receipt of the shipment is acknowledged by the Hazardous Waste Coordinator, the inbound manifests, LDRs and support documents are filed together per each shipment.
- The “DESIGNATED FACILITY TO GENERATOR” copy of the manifest is scanned for electronic filing.
- The original “DESIGNATED FACILITY TO GENERATOR” copy is mailed to the generator within 35 days of the shipment date of the waste.

5.5.3. Outbound Manifests

- The Hazardous Waste Coordinator is responsible for management of the outbound manifest copies and return manifest from the downstream TSD.
- Each outbound shipment manifest, LDR and associated support documents will be filed per each waste shipment. The manifest copies in the file shall include at minimum the “GENERATORS INITIAL COPY”, the LDR and the “DESIGNATED FACILITY TO GENERATOR” copy of the manifest to document receipt of the shipment at the downstream TSD. Other supporting documentation for the shipment will also be retained in the file.
- The original “DESIGNATED FACILITY TO GENERATOR” copy should be mailed within 35 days of the shipment date of the waste.

- Upon receipt of the “DESIGNATED FACILITY TO GENERATOR” copy of the manifest, the “DESIGNATED FACILITY TO GENERATOR” will be filed in the shipment file along with the “GENERATORS INITIAL COPY”.
- The “Manifest Returned” field in E-ware will be updated for each shipment when a “DESIGNATED FACILITY TO GENERATOR” manifest is received. This will allow tracking of the return manifest process.

The screenshot shows the 'Assign Drums' window in the E-ware system. The 'Manifest Returned' field is highlighted with a red box and contains the date '28-OCT-2014'. Other fields include 'Outbound Manifest' (S01040), 'Uniform Manifest' (086761501 FLE), 'Manifest Type' (O), 'Ship Date' (02-OCT-2014 00:00), 'Customer Manifest', 'Disposal Facility' (Veolia Environmental Services, LLC - Head), and 'Rejected Manifest?' (checkbox). Buttons for 'Items', 'Drums', 'Waste Code Details', 'Waste Codes', and 'Update' are visible at the bottom.

- The Manifest Returned Report in E-ware can be run to determine which outbound shipments are at risk for not receiving a manifest within the required 35 day timeframe.

Facility SOP 6 - Shipment Unloading

6.1. Prepare Truck for Unloading

6.1.1. Open trailer doors

- 1) Swing doors cannot be opened while the trailer is docked and must be opened prior to docking the truck.
- 2) A roll up door may be left down while the trailer is docked, but should be closed again prior to docking the truck.

6.1.2. Inspect the load

- 1) Ensure the load is secure and will not shift in an abrupt stop that may occur when the trailer bumps the dock.
- 2) If the trailer has a roll-up door, close the door after inspection prior to docking the truck.

6.1.3. Inspect the dock

- 1) Ensure the dock plate lip is down and will not collide with the truck when backed into the dock.
- 2) Make sure that wheel chocks are available.
- 3) Make sure the wheel chocks will not be run over while backing the truck to the dock.
- 4) Make sure the dock bumpers are in place and in good condition to avoid damage to the trailer.

6.2. Dock Truck

6.2.1. Back Truck to the Dock

- 1) The truck driver will back the truck to the dock space.
- 2) The dock spaces are tightly spaced. A spotter should be used to help guide the truck into the dock space squarely and safely.
- 3) The spotter will also guide the driver when distance to the dock is short to prevent a hard collision with the dock bumpers, which can cause damage to the trailer or the load.

6.2.2. Chock the wheels

- 1) The wheels of the truck must be chocked to prevent the truck from creeping away from the dock. Wheel chocking is the responsibility of the person who will be unloading the truck as it is his/her safety at stake!!

6.2.3. Set Dock Plate

- 1) The dock plate is set by pulling the chain, which releases the dock plate and allows the lip to extend on to the trailer.
- 2) Stand away from the dock plate lip and face the trailer when releasing the dock plate to ensure that you are clear of the moving lip.
- 3) Ensure no other personnel are near the lip when releasing the dock plate.

6.2.4. Inspect the trailer floor

- 1) Inspect the trailer floor for damage, holes and protrusions before starting the unloading process.

6.3. Unloading the Trailer and Staging Waste

6.3.1. Transporting Drums

- 1) Unload the trailer by using a forklift and / or drum dolly to transport drums from the trailer to the sampling / weighing station. Manual handling of drums may cause strains and sprains.

6.3.2. Staging Waste

- 1) Stage waste in warehouse after QC check and follow the procedures in **Facility SOP 4** - to finalize waste receiving.
- 2) Keep aisles clear when staging waste.
- 3) Mark staged groups with corresponding staging identification signs.
- 4) Enter the date on the sign with a dry-erase marker.

- 6.3.3. Trailer doors must be locked after hours while docked or staged and at all times during transportation, in accordance with applicable DOT regulations.

Facility SOP 7 - Hazardous Materials/Waste Storage Requirements

7.1. General

Proper Storage of Hazardous materials and hazardous waste is a critical part of maintaining an operation that is safe for employees, the community and the environment. The prescribed storage requirements of this procedure help to control hazards in a pro-active manner and to minimize the risk of incidents at the TSD.

7.2. Waste Storage Rules

- Hazardous Materials and Hazardous Wastes are to be stored in containers that are in good condition, and in acceptable DOT containers when required.
- Waste containers must be properly labeled per RCRA requirements and marked / labeled per DOT requirements when stored in ACTreatment facility.
- All containers must be stored in a manner to allow for proper inspection of the waste. Inspection includes looking for damage, leaks, proper labeling and proper markings. Refer to the Facility Inspections SOP for more detail on inspection requirements,
- Waste containers must be closed at all times when in the storage areas at ACTreatment. DOT approved pressure relief devices may be used in special circumstances to relieve pressure or vacuum when required for safe storage.
- Waste containers of 30 gallons or greater may only be stacked upon each other two high. Containers smaller than 30 gallons may only be stacked at a maximum of three high, only when weights of the containers do not pose a safety hazard.
- Containers may not be stored in a manner that blocks egress routes or safety equipment (fire extinguishers, safety showers, spill kits) in ACTreatment facility.
- Containers that are stored on the racks of the warehouse must be secured to prevent falling during handling or storage. Shrink wrap, banding, tape or overpacking may be used to secure containers for rack storage.
- Liquids are not allowed to be stored on the 3rd racking tier or higher in ACTreatment facility.
- All waste containers at the facility must be stored inside the warehouse where proper containment exists and are not allowed to be stored on the dock or in the parking area overnight (or when the facility is unattended). Dock areas may be used for staging only while the facility is attended.
- Flammable and reactive hazardous wastes may not be stored within 50 feet of ACTreatment property. "50-foot lines" are marked in the facility to delineate the prohibited areas for storage of flammable or reactive hazardous wastes.
- All wastes must be segregated from other wastes that will react if accidentally commingled (see Section 7.3. of this document for segregation rules and table).

7.3. Waste Segregation

- 7.3.1. The waste will be stored in the appropriate room in the warehouse based on the DOT shipping primary hazard class of the waste.
- 7.3.2. The table below illustrates acceptable waste storage at the TSD:

DOT Hazard Class	Room B	Room C	Room D	Room E	Room F
2.1	✓	✓	✓		
2.2	✓	✓	✓	✓	✓
2.3	✓				
3	✓	✓	✓		
4.1	✓	✓	✓		
4.2	✓	✓	✓		
4.3	✓	✓	✓		
5.1					✓
5.2					✓
6.1	✓	✓	✓	✓	✓
8 (acid)					✓
8 (base)				✓	
9	✓	✓	✓	✓	✓
Non DOT	✓	✓	✓	✓	✓
✓ = storage allowed					

7.3.3. Storage requirements for individual waste categories are indicated in the category-specific SOPs

Facility SOP 8 - Description of Procedures, Structures or Equipment for Hazard Prevention

8.1. Design and operation of facility

ACTreatment facility is designed, constructed, maintained, and operated in a manner that minimizes the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

- The facility has designated H-occupancy storage areas for storage of flammable materials and all storage rooms have secondary containment in sufficient quantity to minimize the likelihood of release to air, soil or surface waters in the unlikely event of a spill as described in **Section 2** of the **ACTreatment RCRA Part B Permit Application**
- Waste materials are stored in designated areas, based on their hazard class (as described in **Section 5** of the **ACTreatment RCRA Part B Permit Application** and in **Facility SOP 8 - Trailer doors must be locked** after hours while docked or staged and at all times during transportation, in accordance with applicable DOT regulations.
- Hazardous Materials/Waste Storage Requirements to minimize the likelihood of incompatibles reacting with each other
- As described below, waste containers are received, inspected, stored and managed as described in general and waste-category-specific standard operating procedures (SOPs) in order to minimize the likelihood of an spills or releases
- A Contingency plan is in effect to ensure rapid response to any spills or releases see **Facility SOP 9 - cility SOP 12 - ACTreatment Facility Contingency Plan** and regular inspections are conducted (as described in Facility SOP 17 - TSD Facility Inspections to ensure that all applicable facility safety systems are available and able to function as intended in the event of a spill or a release

8.2. Spill Prevention

All hazardous wastes are to be managed in a way that prevents release. The following general requirements must be followed. They include:

8.2.1. Waste Container Management

- 1) All hazardous waste containers must be in good condition and compatible with the materials stored within.
- 2) All hazardous waste containers must be accessible and spacing between containers must provide sufficient access to perform periodic inspections and respond to releases.
- 3) Empty hazardous waste containers (drums) must have all markers and labels removed and the container marked with the word 'empty'.
- 4) Any spills on the exterior of the container must be cleaned immediately.
- 5) Flammable materials stored or dispensed from drums or totes must be grounded to prevent static spark.

- 6) Do not overfill waste drums when performing consolidations. 3" of headspace must remain at a minimum to allow for expansion due to temperature or pressure changes.
- 7) Non-conforming or damaged containers must be packed into a salvage drum or repackaged immediately when discovered.

8.2.2. Housekeeping

- 1) All hazardous wastes must be stored inside the warehouse or under cover if containerized in a bulk container;
- 2) All hazardous substance containers should be closed while in the storage areas. Open container processing is not allowed in the warehouse storage areas.
- 3) Use drip pans or other collection devices to contain drips or leaks while consolidating to other containers or equipment;
- 4) Immediately clean up and properly manage all small spills or leaks;
- 5) Inspect equipment and hazardous waste storage areas daily to ensure leaks or spills are not occurring per the Facility and Waste Inspection procedure;
- 6) Keep all work areas and hazardous waste storage areas clean and in good general condition.

8.2.3. Secondary Containment

- 1) Store and handle all hazardous wastes above the concrete areas of the TSD facility or over appropriate secondary containment. The TSD facility is designed as secondary containment.
- 2) Secondary containment should be inspected daily per the Facility and Waste Inspection procedure, and any spills identified in secondary containment must be immediately cleaned up and removed.

8.2.4. Marking and Labeling

- 1) Ensure all hazardous wastes are properly marked and labeled in accordance with all federal, state and local regulations. See SOP TSD Labeling Requirements for specific instructions and requirements for waste container labeling.
- 2) Waste containers that are delivered to the facility without proper labeling must be corrected before receiving and storing the waste.

8.3. Prevention of Hazards during Unloading Operations

Unloading hazards shall be reduced through procedures, structural features and equipment used at the facility. Containerized wastes shall be unloaded and loaded only at the truck dock which is equipped with mechanical dock levelers. All wastes that enter or leave the facility shall be handled over the sloped area of the loading dock. Small trucks shall drive over the berm onto the dock from the east side of the facility. Longer trucks shall back up to the dock, parking on the sloped and bermed concrete apron to the south. Both areas can contain a 1000-gallon spill.

The facility will maintain hand trucks and forklifts for hazardous waste container carrying. Forklifts will be operated as described in the ACT Powered Industrial Truck (PIT). Generally accepted practices for container handling will be used. In particular,

loads will never be lifted higher than is necessary to minimize the risk of breakage should the load fall

8.4. Prevention of Flooding and Run-Off from Waste Handling Areas

Flooding of the hazardous waste storage building shall be prevented by the land under the building which is elevated five feet above the surrounding land. This allows any rain that might land near the building to flow away from, instead of towards, the building. Also, the building's roof is sloped and is equipped with a gutter system which allows the rainwater to flow from the facility in a southwesterly direction into the catchment ponds.

Prevention of runoff from the waste handling areas shall be accomplished in several ways. The storage area for the hazardous waste is situated inside the building over sealed concrete floors that are sloped and bermed so in the event of a spill or other release the material is contained inside the building. All other waste handling areas such as the docks are paved with concrete which provide secondary containment.

8.5. Prevention of Water Supply Contamination

All the measures discussed in the section above will decrease the chance of contamination of water supply. All waste handling will be performed over concrete and any spills or leaks that do occur shall be cleaned up immediately. Also, the road around the building slopes to the west so that rainwater flows into the drainage ponds in the back of the building. This prevents the mixing of rainwater and any potential contamination from trucks at the dock.

8.6. Mitigation of Effects of Equipment Failures and/or Power Outage

Power outages and equipment failures do not create problems in the facility for the following reasons:

- The storage section of the facility is lighted only by skylights. The docks are equipped with explosion-proof electrical lighting. The forklifts are equipped with floodlights which allow for their safe use in the dark.
- In an emergency, pull stations will be operable since the electronic alarm system is battery powered. Verbal announcements will also be effective means of warning employees to evacuate.
- Emergency exit signs shall be self-illumination and visible without electric power.

8.7. Prevention of Undue Exposure of Personnel to Hazardous Waste

Training is the key to the prevention of employee exposure. All personnel at the facility shall be trained in procedures for properly performing facility operations including handling hazardous wastes and responding to emergency situations. Included in the training shall be instruction in the use of personal protection equipment and the location and use of safety showers and eyewash units which are located at strategic points throughout the warehouse. Additional information on the employee training program is included in **Facility SOP 2 - ACTreatment Employee Training**

Specific procedures for handling different waste categories are included below in **Waste Category SOPs**, however, in general:

- Engineering controls, such as working in well ventilated areas like the open loading dock areas, will be used wherever possible
- Work practices such as keeping containers closed, minimizing spills and releases, good housekeeping, etc. will be followed as described in waste category SOPS
- All employees shall be provided with protective equipment which includes, but is not limited to, eye protection, steeled-toed boots, respirators, protective overalls and chemically resistant aprons.
- At a minimum, employees and visitors shall be required to wear eye protection in the warehouse, on the docks and in the yard at all times.
- Respirator use will be consistent with requirements in the ACT Respiratory Protection Program (RPP)

Additional procedures for receiving, inspecting, storing and consolidating specific categories of hazardous waste are included in **Facility SOPs**.

8.8. Prevention of Releases to the Atmosphere

Other ACT Companies that transport waste to ACTreatment facility implement additional preventive procedures before the hazardous waste is transported to the facility. Before loading the containers of waste at a generator's site, the containers are checked for soundness, proper closure and labeling, and compliance with U.S. Department of Transportation (DOT) standards. Any damaged containers that might leak or burst during transporting or unloading are not accepted for transportation.

All containers are inspected as they are received at the facility for proper labeling and closure and to ensure they are structurally sound. At the facility, all containers will be kept closed except as necessary for business activities such as inspection, sample collection, consolidation.

In the event of a leak or a spill, all liquids will be retained in the curbed, secondary containment within each room. Specific response procedures are described in the facility contingency plan, however releases to the atmosphere will be minimized through prompt response to any spills or releases in order to minimize quantities that could evaporate or be released to atmosphere.

8.9. Employee Training

All employees must receive periodic training on the proper handling of hazardous wastes; spill prevention practices, and emergency response procedures. Training must include a review of this spill prevention and emergency response plan, and a review of location and use of emergency response equipment. Training requirements per this procedure and RCRA regulation are covered in initial HAZWOPER training, annual HAZWOPER refresher training as well as monthly safety meetings and other required training. See **Facility SOP 2 - ACTreatment Employee Training**.

Facility SOP 9 - Compactor Operations

9.1. Pre Operation Instructions

- 9.1.1. During use stay clear of all moving parts of the compactor. Entanglement into the equipment will cause serious injury or death.
- 9.1.2. Only authorized and trained personnel should operate this compactor. This compactor is equipped with a key operated locking system. The keys to this equipment must be controlled, and should only be in the possession of authorized personnel.
- 9.1.3. Do not remove access covers except for servicing. This equipment has been identified as Confined Space Entry. To access inside the compactor you must follow the Confined Space Entry SOP. All hazardous energy of this equipment must be properly isolated and de-energized before servicing this equipment. Only qualified personnel are allowed access to service the equipment.
- 9.1.4. Access doors on the compactor must be secured in place when unit is operating.
- 9.1.5. Normal operation as well as all maintenance and repairs will be subject to the requirements of the ACTreatment "Lockout/Tagout" (LOTO) program
- 9.1.6. Before operating the compactor, make sure that the ratchets and claws (or chains) are securely attached to the receiver container. If unsafe conditions exist contact the TSD Operations Manager.

9.2. Operating Instructions

- 9.2.1. Operating keys will be issued to qualified personnel whose job requires frequent use of the compactor. To obtain the operating key contact the TSD Operations Manager.
- 9.2.2. Place the waste designated for compaction into the compactor receiving compartment. For best operating performance of this equipment do not over fill the receiving compartment.
- 9.2.3. Insert the operating key into the key switch. Turn the key/switch to the left (counter-clockwise) and depress for 1 to 2 seconds, then release. The unit will make one complete cycle, and then stop. Repeat, if necessary, after the compactor has completed its cycle.
- 9.2.4. Do not lend or give your key to any unauthorized person.
- 9.2.5. ***In Case of an Emergency, push the large red button to stop the equipment (E-stop).*** The Emergency Stop Pushbutton, when depressed, will stop all powered operation of the compactor. NOTE: The compactor will not operate with the "E" Stop button depressed.

9.3. Container Replacement

- 9.3.1. Contact the Hazardous Waste Coordinator when the container pressure gauge has reached the posted level to indicate that the receiving container is full.
- 9.3.2. The Hazardous Waste Coordinator will arrange for replacement and shipment of the full container.

Facility SOP 10 - Shredder Operations

10.1. Pre Operation Instructions

- 10.1.1. During use stay clear of all moving parts of the shredder. Entanglement into the equipment will cause serious injury or death.
- 10.1.2. Only authorized and trained personnel should operate the shredder. The shredder is equipped with an interlock system. Bypassing or modifying the interlock system is strictly prohibited.
- 10.1.3. Do not remove access covers except for servicing. This equipment has been identified as Confined Space Entry. To access inside the shredder you must follow the Confined Space Entry SOP. All hazardous energy of this equipment must be properly isolated and de-energized before servicing this equipment. Only qualified personnel are allowed access to service the equipment.
- 10.1.4. All access doors, guards and hopper on the shredder body must always be secured in place when the unit is operating.
- 10.1.5. Before operating the shredder, make sure that the receiving container is secure and will not move. An unsecure receiving container can create a safety hazard. If unsafe conditions exist contact the TSD Operations Manager.
- 10.1.6. Normal operation as well as all maintenance and repairs will be subject to the requirements of the ACTreatment "Lockout/Tag Out" (LOTO) program
- 10.1.7. Never attempt to use your hands or tools to release a jammed shredder. If the shredder jams, contact the TSD Operations Manager.

10.2. Operating Instructions

- 10.2.1. Start the shredder prior to introducing waste into the hopper.
- 10.2.2. Place the waste designated for shredding into the hopper. For best operating performance of this equipment do not over fill the hopper, which can result in jamming of the equipment.
- 10.2.3. Look to see that the shredded material is flowing out from the shredder body.
- 10.2.4. ***In Case of an Emergency, push the large red button to stop the equipment (E-stop).*** The Emergency Stop Pushbutton, when depressed, will stop all powered operation of the compactor. NOTE: The compactor will not operate with the "E" Stop button depressed.

10.3. Container Replacement

- 10.3.1. Contact the Hazardous Waste Coordinator when the receiving container is full. The Hazardous Waste Coordinator will arrange for replacement and shipment of the full container.

Facility SOP 11 - ACTreatment Facility Contingency Plan

(Applicable Regulations §264.50-56, §270.14(b)(7))

This contingency plan is designed to minimize hazards from fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water at, and around Advanced Chemical Treatment's (ACTreatment) facility. The provisions of the plan shall be carried out immediately whenever there is a threat to human health or the environment, as described below.

11.1. Facility Identification and General Information

Advanced Chemical Treatment, Inc.

6137 Edith Boulevard N.E., Albuquerque, NM 87107

505-349-5220

11.2. Type of Facility

On-site storage and consolidation of hazardous waste in containers, tanks, roll-offs and similar containers.

11.3. Copies of Contingency Plan

A copy of the contingency plan and all revisions to the plan are:

- Maintained at the facility; and
- Submitted to all local police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services.

11.4. Arrangements with Local Authorities

In the event of an emergency at the facility, appropriate local authorities have toured the facility and are familiar with the layout of the facility; properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to the facility and possible evacuation routes.

- Bernalillo County Fire Department shall assume primary emergency authority and will coordinate with the City of Albuquerque.
- Lovelace Women's Hospital has been notified and contracted with the facility and is familiar with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

11.5. Emergency Coordinators:

At all times, there will be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. Designated Emergency Coordinators are listed in Table 3, below. Emergency Coordinators are thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled the location of all records within the facility, and the facility layout. In

addition, Emergency Coordinators have the authority to commit the resources needed to carry out the contingency plan.

Table 1 - ACTreatment Emergency Coordinators

Emergency Coordinator	Home Address	Cell #	Work #
Shawn Moudy	4504 Beresford Ln NW Albuquerque, NM 87120	408-470-0195	505-349-5221 x 450
Bill Littleton – 1 st Alternate	5520 Delhi NE Albuquerque, NM 87111	505-273-1256	505-349-5223
Kris Gwash – 2 nd Alternate	3708 Trinidad St Ne Albuquerque NM 87111	505-379-9582	505-349-5224

All designated Emergency Coordinators are management personnel and are responsible for hazardous waste management at the site. The Emergency Coordinators are thoroughly familiar with all aspects of the contingency plan, all operations and activities at the facility, the location and characteristics of waste handled the location of all records within the facility, and the facility layout.

All designated Emergency Coordinators receive extensive training, including Bloodborne Pathogens, CPR/FA/AED, DOT Dangerous Goods, Emergency Action Plan, Emergency Contingency Plan, Hazard Communication, Personal Protective Equipment and Respiratory Protection as well as initial 40-hr HAZWOPER training and annual refresher training.

11.6. Implementation of the Contingency Plan

The Contingency Plan will be implemented if an incident might threaten human health or the environment. The Emergency Coordinator has full authority to make this decision. Depending upon the degree of seriousness, the following potential emergencies might call for the implementation of the contingency plan:

11.6.1. Spills

- A spill of hazardous waste from containers or tanks which can be contained on-site but where the potential exists for groundwater pollution.
- A spill of any stored hazardous waste from containers or tanks which cannot be contained on-site resulting in off-site soil contamination and/or ground or surface water pollution.

11.6.2. Fires

- A fire which could cause the release of toxic fumes from hazardous waste.
- A fire which, if it spreads, could ignite materials at other locations at the site or cause heat-induced explosions.
- A fire which could spread to off-site areas.

11.6.3. Explosions

- An imminent danger exists that an explosion involving hazardous waste could occur, resulting in a safety hazard due to flying fragments or shock waves.

- An imminent danger exists that an explosion could ignite other hazardous waste at the facility.
- An imminent danger exists that an explosion involving hazardous waste could result in the release of toxic material.
- An explosion has occurred, resulting in significant damage to the facility, uncontrolled fire, personal injury, release of hazardous materials to the environment or other serious consequences

11.7. Emergency Response Procedures

11.7.1. Immediately Upon Discovery of an Emergency

An employee discovering a spill, fire, or an imminent danger of explosion involving hazardous waste that is not easily controllable with equipment and materials at hand must contact the Emergency Coordinator. The Emergency Coordinator will immediately respond and assess the situation.

If the emergency can be controlled without evacuating the facility, emergency crew members will be contacted to respond to the incident. If the Emergency Coordinator determines that the incident requires evacuation of the facility, he will immediately activate the internal alarm. (NOTE: All ACTreatment employees are instructed to activate the internal alarm system if the incident is an obvious immediate threat to fellow employees or the environment.)

The Emergency Coordinator will concurrently assess the situation by identifying the character, exact source, amount and extent of any released material. They will also make an assessment of possible threats to human health and the environment.

If the incident could threaten the environment or human health outside the property, the Emergency Coordinator will contact the Bernalillo County Fire Department (9-1-1) and Lovelace Women's Hospital if any injury that requires medical attention has occurred.

The Emergency Coordinator will take all necessary measures to contain the hazard within the facility property, and to prevent its spread to other nearby properties, with the assistance of emergency personnel assigned by the various parties contacted.

11.7.2. Tank and Container Spills

- 1.** Determine source of spill.
- 2.** Identify the waste material spilled and determine the hazards involved in terms of potential for fire, hazardous gas release, corrosion, explosion, and water pollution.
- 3.** Evacuate all endangered or unnecessary personnel. In case of the release of toxic or flammable gases, determine if off-site evacuation is advisable. Remove nearby wastes that may be incompatible with the spilled material.
- 4.** Contact the Bernalillo County Fire Department (9-1-1) as needed
- 5.** All spill response personnel are to wear appropriate protective equipment, including respirators and/or SCBA's as needed, and are to stay upwind of the spill to the extent that is possible.
- 6.** Contain the spill to the smallest area possible.
- 7.** Place absorbent material on a liquid spill.

8. If the spill is from a leaking or damaged container, immediately over pack into an appropriate container.
9. If this spill is from a tank, dike around the tank with absorbent material.
10. If the spillage is due to the tank being ruptured, immediately empty the tank.
11. After the spill is contained, treat the spill with neutralizing agents to lessen risks of fire, corrosion, explosion, or other hazards. Apply non-reactive sorbent materials.
12. Decontaminate area affected by spill by removal of spilled and sorbent materials and contaminated soil.
13. Clean up, restore, or replace spill response equipment and return it to its original location.

11.7.3. Tank & Drum Storage Fire

1. If the fire cannot be readily controlled with available equipment, the area will be immediately evacuated.
2. Determine what is on fire by location, drum label, inventory, or other means.
3. Determine if persons are endangered by the fire or if the fire could spread to other wastes
4. Evacuate all endangered persons. In case of release of toxic gases or where there is potential for explosion, determine if off-site evacuation is advisable.
5. Define the limits of the fire.
6. Estimate the potential dangers due to location with respect to other wastes in the immediate vicinity.
7. Call the local Bernalillo County Fire Department (911) if they may be needed.
8. Responding firefighters will wear full protective clothing and breathing apparatus as is appropriate.
9. Firefighting should be done at a maximum allowable distance staying upwind and from a protected location, if possible.
10. Small fires such as a single drum fire can be approached with portable extinguishers, dirt, or sand to extinguish flames by smothering.
11. All large fires will require support from the Bernalillo County Fire Department.
12. Extra caution is to be taken with containerized material fires for signs of rupture or explosion due to heat releasing hot liquids, flammable vapors, or poisonous gases.
13. After fire, clean up affected areas.
14. Run-off from water used in firefighting should be treated as a hazardous waste and disposed of properly.
15. Clean up all firefighting equipment and return it to its original location in a state of readiness.

11.7.4. Evacuation

Facility personnel are instructed to immediately stop activities and proceed to the nearest exit and assemble at the designated staging area. If the nearest exit is blocked (by a release of hazardous waste or fire), personnel must use the next nearest available exit. A diagram of available exit routes is located at each work area. See **Figure 1- ACTreatment Facility Evacuation Routes**.

All employees hearing the alarm must close down their equipment and proceed to the staging area to await further instructions. A designated employee will conduct a roll call for all employees who reported to the staging area.

The following actions shall be taken when a site evacuation is ordered:

1. The Emergency Coordinator will pull the alarm and announce the evacuation by shouting.
2. Each individual shall determine which route he or she will take depending on the location of the incident and his or her location at the time the alarm is sounded.
3. All personnel and visitors shall quickly leave the Facility in a safe manner. Visitor contacts shall direct visitors off-site.
4. Personnel shall re-group at the intersection of the road easement and Edith Boulevard. East of the Facility.
5. A person designated by the Emergency Coordinator will initiate a head count of all the people at the regroup area. This information shall be given to the Emergency Coordinator.
6. Refer to Figure 1- ACTreatment Facility Evacuation Routes

11.8. Notification of Situations Which Could Threaten Human Health or the Environment Outside of the Facility

If the Facility has had a release, fire or explosion which could threaten human health or the environment outside the Facility, the Emergency Coordinator shall immediately inform the appropriate local authorities if her/his assessment indicates that evacuation of local areas may be advisable. She/he shall also be available to help appropriate officials decide whether the local areas should be evacuated.

The Emergency Coordinator shall immediately inform either the government official designated as the on-scene coordinator for the facility's geographical area or the Nation Response Center if the Facility has had a release of a reportable quantity, fire or explosion which could threaten human health or the environment outside the Facility. The report shall include:

1. Name and telephone number of reporter;
2. Name and address of the Facility;
3. Time and type of incident;
4. Name and quantity of material(s) involved, to the extent known;
5. The extent of injuries, if any; and
6. The possible hazards to human health or the environment outside the Facility.

11.9. Following Attainment of Control

The Emergency Coordinator will make sure that cleanup and restoration have progressed to the point of not jeopardizing the health and safety of the employees before discontinuing emergency operations.

Immediately after an emergency, the Emergency Coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility (unless ACTreatment can demonstrate, in accordance with 40 CFR §261.3(c) or (d) that the recovered material is not a hazardous waste). For all hazardous waste, ACTreatment becomes a generator of the waste and will manage it in accordance with all applicable requirements of 40 CFR parts 262, 263, and 264.

The Emergency Coordinator will ensure that all emergency equipment is restored to full operational status by emergency personnel following any incidents or emergencies

The Emergency Coordinator will investigate the cause of the emergency and will take steps to prevent a recurrence of such or similar incidents. This will be documented on an Incident Report form.

11.10. Prevention of Recurrence or Spreading of an Incident

During an emergency, the Emergency Coordinator shall take reasonable measures necessary to ensure that a release, fire, or explosion does not occur, recur or spread to other hazardous waste at the facility. Procedures that shall be carried out, when necessary, shall include:

1. Stopping processes or operations;
2. Collecting and containing released wastes;
3. Isolating or removing containers;
4. Inspecting for any leaks or cracks in containers; and
5. Ventilation of the building.

11.11. Emergency Equipment

The table below lists the emergency equipment maintained at the facility including the equipment’s location, physical description of each item on the list and a brief outline of its capabilities. This list must be kept up to date.

Table 2 - Emergency Equipment at ACTreatment

Equipment	Capabilities	LOCATION
Fire Control		
Fire extinguishers	ABC fires	Fire extinguishers are located within 50 feet of all flammable materials storage areas in the warehouse and also on each forklift.
Dry pipe foam	Foam sprinkler system	Under roof of the warehouse (all rooms)
Sprinkler	Double fireman’s hookup	Warehouse rooms for extra foam injection if necessary
Personal Protective Equipment		
Protective eyeglasses or goggles	Protect eyes from splashes	Office for visitors, employees keep own glasses
Face shields	Protect eyes and face	In PPE storage area.
SCBA’s	30-minute air supply	In Technician Office Area/Room A.
Aprons, chemical resistant	Protect skin and clothing	In PPE storage area.
Gloves, assorted chemical and physical damage resistant	Protect skin from splashes	Part of Hazmat spill cart inventory located within the warehouse in PPE storage area
Protective coveralls	Protect skin and clothing from hazardous waste	Part of Hazmat spill cart inventory located within the warehouse in PPE storage area
Boot shields	Protect skin from	Part of Hazmat spill cart inventory located

Equipment	Capabilities	LOCATION
	splashes	within the warehouse in PPE storage area
Spill Control		
Absorbent	Spill containment	Part of the Hazmat spill cart inventory located in Room E of Warehouse
Forklift	Moving containers and heavy equipment	Warehouse area
Salvage drums	Over packing of damaged drums	South side of the warehouse and on the dock area.
Plastic (polyethylene)	Containment of hazardous spills	Part of the Hazmat spill cart inventory located in Room E of Warehouse
Shovels	Used in cleaning up debris	Part of the Hazmat spill cart inventory located within the warehouse or in Front or Back Dock Area
Broom	Used in cleaning up debris	Part of the Hazmat spill cart inventory located within the warehouse or in Front or Back Dock Area
Duct tape	Used for temporary plugging of leaks	Part of the Hazmat spill cart inventory located within the warehouse Front or Back Dock Area
Emergency Decontamination & First Aid		
Emergency shower/eyewash stations	Decontamination of skin, eyes, and/or clothing	There is 1 shower/eyewash in every room throughout the warehouse (with the exception of Technician Office Area/Room A.
First Aid station	First aid medical supplies	Located within the office area/Room A.
Emergency Communication & Alarm System		
Pull stations	Activates alarm, connected to outside monitoring system	Front office, front dock
Horns	To alert personnel of an emergency	Placed throughout the warehouse

11.12. Required Reports

The time, date, and details of any incident that requires implementing the contingency plan will be recorded in the facility operating record. Within 15 calendar days after the incident, a written report on the incident will be submitted to the Secretary, New Mexico Environment Department (NMED). The report shall include the following:

1. Name, address and telephone number of the owner/operator;
2. Name, address and telephone number of the Facility;
3. Date, time and type of incident (e.g., release, fire);

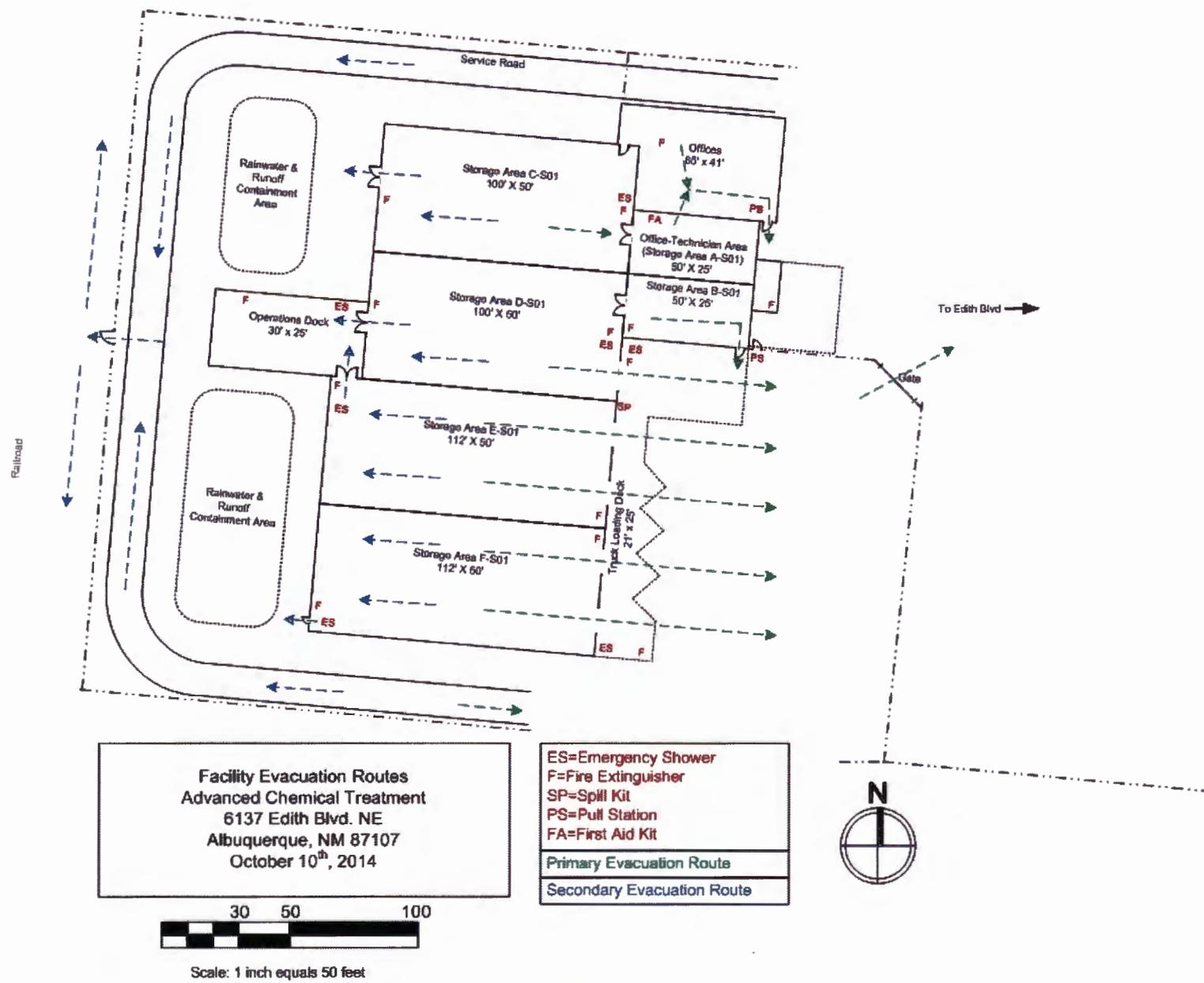
4. Name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
7. The estimated quantity and disposition of recovered material that resulted from the incident.

11.13. Amendment of Contingency Plan

This contingency plan will be reviewed, and immediately amended, if necessary, whenever:

1. The facility permit is revised;
2. The plan fails in an emergency;
3. The facility changes—in its design, construction, operation, maintenance, or other circumstances—in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
4. The list of Emergency Coordinators changes; or
5. The list of emergency equipment changes.

Figure 1- ACTreatment Facility Evacuation Routes



Facility SOP 12 - Selection and Scheduling of Waste Shipments

12.1. Request Drop Appointment from Final TSD

- 12.1.1. The Hazardous Waste Coordinator will request an appointment for delivery of the waste to the destination TSD. Destination TSD appointment procedures will vary from site to site.
- 12.1.2. Once the appointment is set, the Hazardous Waste Coordinator will schedule the timing for selection, picking and consolidation of wastes for shipment.

12.2. Generate Pick List

- 12.2.1. The Hazardous Waste Coordinator will generate a pick list of waste containers for shipment or consolidation / shipment.
- 12.2.2. The Pick List is selected by generating an inventory report in the WMSS and filtering for process code in the WMSS. Using the process codes will ensure that properly routed wastes will be picked by warehouse personnel.

12.3. Pick Waste

- 12.3.1. The Shipping Personnel will use the Pick List to locate the waste for consolidation / shipment.
- 12.3.2. Any deviation from the Pick List must be approved by the TSD Operations Manager.

12.4. Consolidate / Stage Waste Locate to Staging Area

- 12.4.1. After the waste is picked, it is delivered to either consolidation or staging area for pre shipment processing.
- 12.4.2. Consolidation wastes are consolidated to the bulk container for shipment. Each container is scanned to the WMSS bulk location that will be used to create the manifest.
- 12.4.3. Non-Consolidation wastes are delivered to the staging location for processing. Each container is scanned to the WMSS staging location for processing to the manifest.

12.5. Manifest / LDR / Labels / Marking (S00100-1)

- 12.5.1. The Hazardous Waste Coordinator will generate manifests, LDR labels and marking instructions in the WMSS and hand off to Shipping Personnel.
- 12.5.2. The Hazardous Waste Coordinator will submit a copy of the manifest to the destination TSD.
- 12.5.3. Shipping Personnel will Label and mark the containers according to the manifest number and sequence of drums on the manifest.
- 12.5.4. The manifest number and drum sequence number are used to create the drum number as shown below:

Manifest Document Number	Manifest Drum Sequence	Drum Number
S01234	1	S01234-1
	2	S01234-2
	3	S01234-3
	4	S01234-2
	5	S01234-3
	“	“

For manifest lines with multiple drums, the numbers of drums per line are still in the sequence. For example, if manifest line 1 has three drums, they will be numbered S01234-1, S01234-2 and S01234-3. Manifest line two will start with S01234-4

12.6. Piece Count

12.6.1. Shipping personnel responsible for the shipment will perform a piece count using the manifest to check that all containers are staged for loading.

12.7. Load Waste per Shipment Loading SOP

12.7.1. Shipping personnel will load the truck per the Shipment Loading SOP and the trailer will be staged for shipment.

12.8. Manifest Signatures

12.8.1. The Hazardous Waste Coordinator will sign the manifest / LDR as the generator representative.

12.8.2. When custody of the load is transferred to the OTR truck driver, the driver will sign as Transporter 1 on the manifest.

12.9. Placarding

12.9.1. Placards for the load will be given to the driver of the load and placarding instructions will be provided.

Facility SOP 13 - Shipment Loading

13.1. Prepare Truck for Loading

13.1.1. Open trailer doors

- 1) Swing doors cannot be opened while the trailer is docked and must be opened prior to docking the truck.
- 2) A roll up door may be left down while the trailer is docked, but should be closed again prior to docking the truck.

13.2. Inspect the dock

13.2.1. Ensure the dock plate lip is down and will not collide with the truck when backed into the dock.

13.2.2. Make sure that wheel chocks are available.

13.2.3. Make sure the wheel chocks will not be run over while backing the truck to the dock.

13.2.4. Make sure the dock bumpers are in place and in good condition to avoid damage to the trailer.

13.3. Dock Truck

13.3.1. Back Truck to the Dock

- 1) The truck driver will back the truck to the dock space.
- 2) The dock spaces are tightly spaced. A spotter should be used to help guide the truck into the dock space squarely and safely.
- 3) The spotter will also guide the driver when distance to the dock is short to prevent a hard collision with the dock bumpers, which can cause damage to the trailer or the load.

13.3.2. Chock the wheels

- 1) The wheels of the truck must be chocked to prevent the truck from creeping away from the dock. Wheel chocking is the responsibility of the person who will be loading the truck as it is his/her safety at stake!!

13.3.3. Set Dock Plate

- 1) The dock plate is set by pulling the chain, which releases the dock plate and allows the lip to extend on to the trailer.
- 2) Stand away from the dock plate lip and face the trailer when releasing the dock plate to ensure that you are clear of the moving lip.
 - 3) Ensure no other personnel are near the lip when releasing the dock plate. Stand away from the dock plate lip and face the trailer when releasing the dock plate to ensure that you are clear of the moving lip.
 - 4) Ensure no other personnel are near the lip when releasing the dock plate.

13.3.4. Inspect the trailer floor

- 1) Inspect the trailer floor for damage, holes and protrusions before starting the unloading process.

13.3.5. Staging Waste

- 1) Stage the waste in warehouse or on the dock (for waste that will be loaded the same day) after outbound QC check.
- 2) Keep aisles clear when staging waste.
- 3) Mark staged groups with corresponding staging id signs and enter the date on the sign with a dry-erase marker.
- 4) Inspect each container and match the container to a line item on the pick sheet.
- 5) Escalate discrepancies to the Waste Coordinator immediately when discovered.

13.4. Loading the Trailer

13.4.1. Transporting Drums to the Trailer

- 1) Load the trailer by using a forklift and / or drum dolly to transport drums to the trailer from the staging area or directly from the waste location. Manual handling of drums may cause strains and sprains.
- 2) Perform a piece count to ensure that all items are represented on the manifest for the shipment.

13.4.2. Secure the Load

- 1) Secure the load using load bars and or load straps.
- 2) The driver of the truck is ultimately responsible for the load. Ensure that the driver has had an opportunity to inspect the load and agrees that the load is secured properly.

13.4.3. Offer Placards

- 1) The shipper is responsible for providing placards to the driver of the truck that is carrying the load. Refer to 49 CFR Subpart F Part 172 for placarding requirements for hazardous material shipments.

13.4.4. Weighing the load

- 1) Any weight overages will be corrected by removing waste from the trailer immediately prior to transporting the load to the destination (removal of waste will require correction of the manifest).
- 2) Once overages (if any) are corrected, the load is released for transportation to the destination.

13.4.5. Trailer doors must be locked after hours while docked or staged and at all times during transportation, in accordance with applicable DOT regulations.

Facility SOP 14 - TSD Labeling Requirements of Hazardous Waste

14.1. General

Specific labeling is required by both RCRA regulation, DOT regulation and by TSD standard practices. All containers that are received or generated at the TSD are required to be properly labeled per all standards.

14.2. Labels Required

14.2.1. RCRA Hazardous Waste

1) The Environmental Protection Agency requires containers that hold hazardous waste at the TSD facility to be appropriately labeled. The following information must be included on the label:

- The words "HAZARDOUS WASTE"
- Composition and physical state of the waste
- Statement or statements which call attention to the particular hazardous properties of the waste (e.g. flammable, reactive, corrosive, toxic, etc.)
- The accumulation start date
- The name, address and telephone number of the generator

2) Yellow RCRA hazardous waste label completely filled out (generator name, address, telephone number, EPA ID#, RCRA and state waste codes, manifest #, accumulation start date, contents, physical state, hazard properties and DOT shipping name. Labels are placed on the upper 1/3 of the drum.

3) An example of acceptable hazardous waste labels for containers at the TSD

HAZARDOUS WASTE

STATE AND FEDERAL LAW PROHIBIT IMPROPER DISPOSAL.
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY, THE U.S. ENVIRONMENTAL PROTECTION AGENCY
OR THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL.

GENERATOR INFORMATION:

NAME _____
ADDRESS _____ PHONE _____
CITY _____ STATE _____ ZIP _____

MANIFEST TRACKING NO. _____

EPA ID NO. _____
CA WASTE NO. _____ ACCUMULATION START DATE _____

CONTENTS, COMPOSITION:

PHYSICAL STATE: SOLID LIQUID

HAZARDOUS PROPERTIES: FLAMMABLE TOXIC
 CORROSIVE REACTIVITY OTHER

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

STYLE WAC48

14.2.2. Universal Waste

1) Universal Wastes do not require a manifest under 40 CFR Part 262 but are regulated by US DOT as a hazardous material because they meet the criteria for one or more hazard classes specified in 49 CFR 173.2. Under these regulations the package must be

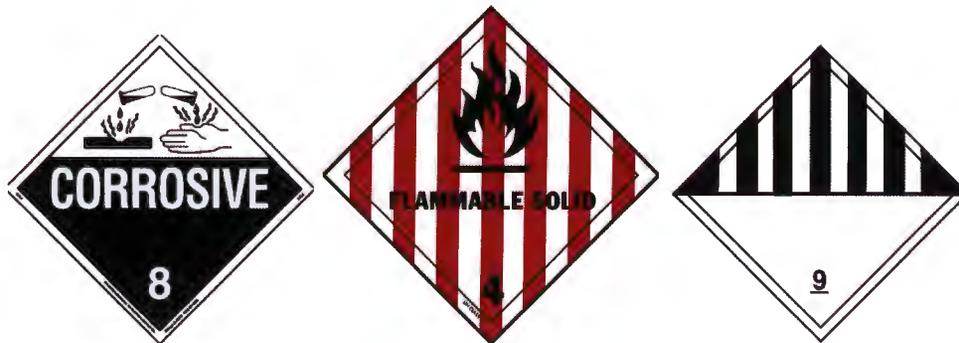
identified as a universal waste. In addition, if the universal waste is a US DOT hazardous material, the shipping documents must include the US DOT proper shipping name.

- 2) An example of acceptable universal waste labels for containers at the TSD



14.2.3. DOT Hazard Identification Label

- 1) Labeling requirements establish clear and accurate communication about the material in a package and hazardous materials packages prepared for transport in commerce must be labeled according to the requirements of 49 CFR. This means that each package must have the specific hazard labels displayed on the package as it is received and before it goes into transportation.
- 2) Examples of DOT required labels:



- 3) Bulk containers

Bulk Labels will be affixed on two opposing sides of bulk hazardous waste that will be carried in a transport vehicle... i.e. totes, super sacks, cubic yard boxes, etc. Labeling will consist of 10 x 10 placards on each side with the appropriate UN number across the middle or two 10 x 10 placards as well as Orange Placards with appropriate UN number.



- 4) Bulk Labels (10 x 10) are placed on two opposite sides of the container (which are orientated with pallet slots for forklift).

14.2.4. Inventory Tracking Label

- 1) All wastes received at the TSD will have an Inventory Tracking Label placed on it for inventory tracking upon receipt / acceptance:

D65121-1			
Generator	Materia Inc.	Received Date	26-SEP-14
Common Name	MIXED FLAMMABLE LIQUIDS WASTE <10% HALOC		
	DOT RQ, UN1993, Waste Flammable liquids, n.o.s. (ACETONE, TOLUENE), 3, PGII (D001)		
Profile	ACT0072	Manifest	007170468FLE
		Line	1
			ROOM D
Process	FUELS LIQ >5000 B		
Waste Codes	212,741,D001,D022,F002,F003,F005		
			
D65121-1			

Facility SOP 15 - TSD PPE General Requirements

15.1. General

Personal Protective Equipment (PPE) use at ACTreatment is a critical part of maintaining an operation that is safe for employees while performing hazardous waste operations. When work is conducted where employees are potentially exposed to physical and chemical hazards in the workplace that cannot be adequately controlled or eliminated using engineering or administrative controls, PPE will be used.

All PPE use will be consistent with applicable OSHA regulations including (but not limited to):

- 29 CFR 1910.132 "Personal Protective Equipment – General Requirements"
- 29 CFR 1910.134 "Respiratory Protection"
- 29 CFR 1910.120 "Hazardous waste operations and emergency response" (HAZWOPER)
- 29 CFR 1910.95 "Occupational Noise Exposure"

15.2. Training

Prior to conducting work requiring the use of personal protective equipment (PPE), employees must be trained to know:

- When PPE is necessary;
- What type is necessary;
- How it is to be worn;
- What its limitations are; and,
- Proper care, maintenance, useful life, and disposal.

15.2.1. Employees must demonstrate an understanding of the training and the ability to use the PPE properly before they are allowed to perform work requiring the use of the equipment.

15.2.2. Employees are prohibited from performing work without donning appropriate PPE to protect themselves from the hazards they will encounter in the course of that work.

15.2.3. If the supervisor or Project Lead has reason to believe an employee does not have the understanding or skill required, the employer must be retrained. Circumstances where retraining may be required include:

- Changes in the workplace or changes in the types of PPE to be used, which would render previous training obsolete;
- The type of PPE changes; or Inadequacies in an affected employee's knowledge or use of the assigned PPE, which indicates that the employee has not retained the necessary understanding or skills.

15.2.4. Signing of the Training Verification Form found in Appendix K certifies that the employee has received and understands these written PPE requirements.

15.3. Hazard Assessment

In order to assess the need for PPE, the Operations Manager identifies specific jobs where exposures occur or could occur. This is accomplished by completing a PPE

Assessment Form (see below) to document what hazards exist or may exist. The PPE Assessment Form documents the hazards that are present or likely to be present. Use of this form will enable the proper selection of PPE. After the appropriate PPE has been selected, it must be properly fitted to each affected employee.

The Operations Manager (or person completing the PPE Assessment Form) must notify the employee(s) of the appropriate PPE required for the job and the reason for the PPE selection. In addition, this person must sign and date the form and have each employee who will be engaged in in the project sign and date the form.

15.4. Categories

PPE to protect the body against contact with known or anticipated chemical hazards has been divided into four categories.

15.4.1. Level A

To be selected when the greatest level of skin, respiratory, and eye protection is required. The following constitute Level A equipment:

Positive pressure, full face-piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA, approved by the National Institute for Occupational Safety and Health (NIOSH)

- Totally-encapsulating chemical-protective suit
- Coveralls (as needed)
- Long underwear (as needed)
- Gloves, outer, chemical-resistant
- Gloves, inner, chemical-resistant
- Boots, chemical-resistant, steel toe and shank
- Hard hat, under suit (as needed)
- Disposable protective suit, gloves and boots (depending on suit construction, may be worn over totally-encapsulating suit)

15.4.2. Level B

The highest level of respiratory protection is necessary but a lesser level of skin protection is needed. The following constitute Level B equipment:

- Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved)
- Hooded chemical-resistant clothing (overalls and long-sleeved jacket; coveralls; one or two piece chemical-splash suit; disposable chemical-resistant overalls)
- Coveralls (as needed)
- Gloves, outer, chemical-resistant
- Gloves, inner, chemical-resistant
- Boots, outer, chemical-resistant steel toe and shank
- Boot-covers, outer, chemical-resistant, disposable (as needed)
- Hard hat (as needed)
- Face shield (as needed)

15.4.3. Level C

The concentration(s) and type(s) of airborne substance(s) is known and the criteria for using air purifying respirators are met. The following constitute Level C equipment:

- Full-face or half-mask, air purifying respirators (NIOSH approved)
- Hooded chemical-resistant clothing (overalls; two-piece chemical-splash suit; disposable chemical-resistant overalls)
- Coveralls or company uniform (as needed)
- Gloves, outer, chemical-resistant
- Gloves, inner, chemical-resistant
- Boots (outer), chemical-resistant steel toe and shank (as needed)
- Boot-covers, outer, chemical-resistant, disposable (as needed)
- Hard hat (as needed)
- Escape mask (as needed)
- Face shield (as needed)

15.4.4. Level D

The lowest level of protection and the most common level of PPE used by ACT. This is a work uniform affording minimal protection: used for nuisance contamination only. The following constitute Level D equipment:

- Body protection which can include coveralls, company uniform or laboratory coat
- Gloves (as needed)
- Boots/shoes, chemical-resistant steel toe and shank
- Boots, outer, chemical-resistant, disposable) (as needed)
- Safety glasses or chemical splash goggles (as needed)
- Hard hat (as needed)
- Escape mask (as needed)
- Face shield (as needed)

15.5. Cleaning & Maintenance

PPE must be kept clean and properly maintained by the employee to whom it is assigned! Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision. PPE is to be inspected, cleaned, and maintained by employees at regular intervals as part of their normal job duties so that the PPE provides the requisite protection.

Supervisors are responsible for ensuring compliance with cleaning responsibilities by employees. If PPE is for general use, the Operations Manager has responsibility for cleaning and maintenance. If a piece of PPE is in need of repair or replacement it is the responsibility of the employee to bring it to the immediate attention of his or her supervisor or the Operations Manager.

It is against work rules to use PPE that is in disrepair or not able to perform its intended function. Contaminated PPE that cannot be decontaminated is disposed of in a manner that protects employees from exposure to hazards.

15.6. Personal Protective Equipment Assessment Form

See over



PERSONAL PROTECTIVE EQUIPMENT ASSESSMENT FORM

INSTRUCTIONS

The ACTreatment Operations Manager or designee shall assess the workplace to determine if hazards are present, or likely to be present, which necessitate the use of personal protective equipment (PPE). If such hazards are present, or likely to be present, the ACTreatment Operations Manager or designee shall select, and require affected employees to use PPE that will protect the employee from the hazards identified.

The ACTreatment Operations Manager or designee shall verify that the required workplace hazard assessment has been performed and that this Form identifies the workplace evaluated; the person certifying that the evaluation has been performed and the date of the hazard assessment.

HAZARD ASSESSMENT

Personal Protective Equipment includes protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers. PPE shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

Name: _____ **Date:** _____

Description of Task: _____

EYE HAZARDS

May include the following: working with chemicals, chipping, sanding, grinding, welding, metal and wood working, radioactive materials, biological materials, laboratory work/research.

<i>Check the box for each hazard:</i>		<i>Description of hazard(s):</i>	<i>Controls in place:</i>	<i>Identify required PPE:</i>
Chemical Exposure	Yes <input type="checkbox"/>		<input type="checkbox"/> Work in fume hoods	<input type="checkbox"/> Safety glasses
High Heat/Cold	Yes <input type="checkbox"/>		<input type="checkbox"/> Enclosure/guarding	<input type="checkbox"/> Safety goggles
Dust or Flying Debris	Yes <input type="checkbox"/>		<input type="checkbox"/> Shielding (bystanders)	<input type="checkbox"/> Face shield
Impact	Yes <input type="checkbox"/>		<input type="checkbox"/> Safe Work Practices	<input type="checkbox"/> Welding helmet
UV Light	Yes <input type="checkbox"/>		<input type="checkbox"/> Dust collection system	<input type="checkbox"/> Cutting goggles
Radiation	Yes <input type="checkbox"/>		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:

HEAD HAZARDS

May include the following: working below other employees who are using tools or materials that could fall; working on energized equipment and working in confined spaces, construction sites

<i>Check the box for each hazard:</i>		<i>Description of hazard(s):</i>	<i>Controls in place:</i>	<i>Identify required PPE:</i>
Impact	Yes <input type="checkbox"/>		<input type="checkbox"/> Canopy	<input type="checkbox"/> Class G hard hat
Electrical Shock	Yes <input type="checkbox"/>		<input type="checkbox"/> De-Energize	<input type="checkbox"/> Class E hard hat
Entanglement	Yes <input type="checkbox"/>		<input type="checkbox"/> Hair secured	<input type="checkbox"/> Class C hard hat
Other:	Yes <input type="checkbox"/>		<input type="checkbox"/> Other: Awareness	<input type="checkbox"/> Bump cap/welding cap



PERSONAL PROTECTIVE EQUIPMENT ASSESSMENT FORM

FOOT HAZARDS

May include the following: exposure to chemicals, welding, cutting, materials handling, demolition, renovation, construction, electrical work, flammable or explosive materials

Check the box for each hazard:		Description of hazard(s):	Controls in place:	Identify required PPE:
Chemical Exposure	Yes <input type="checkbox"/>		<input type="checkbox"/> Substitution	<input type="checkbox"/> Work boots
High Heat/Cold	Yes <input type="checkbox"/>		<input type="checkbox"/> Mechanical device used	<input type="checkbox"/> Steel-toed shoes/boots
Impact/Compression	Yes <input type="checkbox"/>		<input type="checkbox"/> Housekeeping	<input type="checkbox"/> Slip-resistant shoes
Puncture	Yes <input type="checkbox"/>		<input type="checkbox"/> Isolation/grounding	<input type="checkbox"/> Puncture-resist shoes
Explosive/Flam. atmos.	Yes <input type="checkbox"/>		<input type="checkbox"/> Safe Work Practices	<input type="checkbox"/> Non-conductive
Slippery/Wet Surfaces	Yes <input type="checkbox"/>		<input type="checkbox"/> Appropriate clothing	<input type="checkbox"/> Metatarsal protection
Electrical	Yes <input type="checkbox"/>		<input type="checkbox"/> Other: ventilation	<input type="checkbox"/> Shin guards
Other:	Yes <input type="checkbox"/>		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:

HAND HAZARDS

May include the following: work with chemicals, abrasion/cut hazards during demolition and renovation, woodworking, hot or cold objects/materials medical facilities, lab research, animal areas, radioactive and biological materials.

Check the box for each hazard:		Description of hazard(s):	Controls in place:	Identify required PPE:
Chemical Exposure	Yes <input type="checkbox"/>		<input type="checkbox"/> Substitution	<input checked="" type="checkbox"/> Chemical-resistant gloves
High Heat or Cold	Yes <input type="checkbox"/>		<input type="checkbox"/> De-Energize	<input type="checkbox"/> Thermal-protective gloves
Cuts or Abrasion	Yes <input type="checkbox"/>		<input type="checkbox"/> Elimination	<input type="checkbox"/> Cut-resistant gloves
Puncture	Yes <input type="checkbox"/>		<input type="checkbox"/> Avoidance	<input type="checkbox"/> Leather gloves
Electrical Shock	Yes <input type="checkbox"/>		<input type="checkbox"/> Other:	<input type="checkbox"/> Voltage-rated-Class:
Radiation	Yes <input type="checkbox"/>		<input type="checkbox"/> Other: Awareness	<input type="checkbox"/> Latex/nylon exam gloves
Vibration/grip	Yes <input type="checkbox"/>		<input type="checkbox"/> Other:	<input type="checkbox"/> Anti-vibration gloves
Bloodborne Pathogens	Yes <input type="checkbox"/>			

BODY/TORSO HAZARDS

May include the following: chemical/hazardous material exposure, abrasive blasting, welding, cutting, brazing, chipping, sanding, grinding, high heat/cold, radiological or biological work.

Check the box for each hazard:		Description of hazard(s):	Controls in place:	Identify required PPE:
Chemical Exposure	Yes <input type="checkbox"/>		<input type="checkbox"/> Reduce time exposed	<input type="checkbox"/> Lab coat
Extreme Heat/Cold	Yes <input type="checkbox"/>		<input type="checkbox"/> Guards/barriers	<input type="checkbox"/> Apron: PVC
Radiation	Yes <input type="checkbox"/>		<input type="checkbox"/> Substitution	<input type="checkbox"/> Flame-retardant



Advanced Chemical Treatment

PERSONAL PROTECTIVE EQUIPMENT ASSESSMENT FORM

Impact	Yes <input type="checkbox"/>		<input type="checkbox"/> De-Energize	<input type="checkbox"/> Coveralls
Cut/Abrasion/Puncture	Yes <input type="checkbox"/>		<input type="checkbox"/> Mechanical devices	<input type="checkbox"/> Vest
Electrical Arc	Yes <input type="checkbox"/>		<input type="checkbox"/> Other:	<input type="checkbox"/> Tyvek suit
Pushing/pulling/lifting	Yes <input type="checkbox"/>		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:

FALL HAZARDS

Work on a surface with an unprotected side or edge that is 4 feet or more above a lower level.

Check the box for each hazard:		Description of hazard(s):	Controls in place:	Identify required PPE:
Fall hazard	Yes <input type="checkbox"/>	Elevated dock surface	<input type="checkbox"/> Guardrail	<input type="checkbox"/> Full-body harness
			<input type="checkbox"/> Safe ladder practices	<input type="checkbox"/> Toe wall

NOISE HAZARDS

(Exposed to sound levels over 85 dBA) may include the following: grinding, sanding, using pneumatic equipment, jackhammers, working in mechanical rooms or air handling units.

Check the box for each hazard:		Description of hazard(s):	Controls in place:	Identify required PPE:
Noise hazard	Yes <input type="checkbox"/>		<input type="checkbox"/> Noise reduction	<input type="checkbox"/> Ear plugs
Ultrasonics	Yes <input type="checkbox"/>		<input type="checkbox"/> Reduced exposure	<input type="checkbox"/> Ear muffs

RESPIRATORY HAZARDS

May include the following: using certain chemicals outside a fume hood, applying paints/chemicals in confined spaces, welding certain metals.

Check the box for each hazard:		Description of hazard(s):	Controls in place:	Identify required PPE:
Chemicals	Yes <input type="checkbox"/>		<input type="checkbox"/> Fume hood	<input type="checkbox"/> Half-face
Particulates	Yes <input type="checkbox"/>		<input type="checkbox"/> Local exhaust ventilation	<input type="checkbox"/> Full-face
Confined space work	Yes <input type="checkbox"/>		<input type="checkbox"/> Increase air flow	<input type="checkbox"/> SCBA
Welding/cutting fumes	Yes <input type="checkbox"/>		<input type="checkbox"/> Filtration	<input type="checkbox"/> PAPR
Other	Yes <input type="checkbox"/>		<input type="checkbox"/> Work outside	<input type="checkbox"/> Dust mask

CERTIFICATION

I certify that the above inspection was performed to the best of my knowledge and ability, based on the hazards present on this date.

Name (please print):	Date:	Signature:
Title:		Telephone:



Advanced Chemical Treatment

PERSONAL PROTECTIVE EQUIPMENT ASSESSMENT FORM

Description of Task:	
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I CERTIFY THAT I HAVE REVIEWED AND UNDERSTAND THE ABOVE REQUIREMENTS REGARDING THE USE OF PERSONAL PROTECTIVE EQUIPMENT.

Print	Sign

Print	Sign

Facility SOP 16 - TSD Facility Inspections

16.1. General

Facility Inspections are a critical part of maintaining an operation that is safe for employees, the community and the environment. Scheduled inspections of the facility and wastes help to control hazards in a pro-active manner and to minimize the risk of incidents at the TSD. The following inspections are required at the ACT TSD:

- Daily inspection of container handling areas
- Weekly inspection of container storage areas
- Monthly inspection of the facility and safety equipment
- Annual inspection of fire suppression / safety equipment

16.2. Daily Inspections

16.2.1. Daily inspection includes inspection of container handling areas for evidence of spills and / or hazards that can result in spills. Areas that are to be inspected include:

- Dock areas
- Dock sumps
- Trailer parking and yard(including under trailers)
- Processing areas for consolidation
- Storage area aisle ways (to ensure unobstructed egress)
- Inbound processing area (scales)
- HHW processing area
- Roll-off containment pads
- Containment ponds
- Fencing and gates for evidence of break ins

16.2.2. Each area is inspected for evidence of spills, safety hazards, proper housekeeping and availability of safety equipment.

16.2.3. A copy of the Daily Inspection Form is included below

16.3. Weekly Inspections

16.3.1. Weekly inspections will be conducted in all container storage areas ensure that there are no containers that are leaking, or are at risk of leaking. Items on the weekly inspection include:

- Inspection of all containers for proper labeling
- Containers are in good condition
- Evidence of pressure or vacuum in containers
- Pallets are in good condition
- Storage racks are in good condition
- No flammable or reactive wastes stored within 50 feet of the property line
- Safety showers and eyewashes are in good working condition and kept clear
- No wastes are stored on the dock(s) overnight
- Personal Protective Equipment is available and well stocked
- Adequate Housekeeping

16.3.2. A copy of the Weekly Inspection Form is included below

16.4. Monthly Inspections

16.4.1. Monthly inspections will be conducted to ensure that in the event of an emergency, safety equipment will be available and in good working condition in the event of an emergency. Monthly inspections include:

- Self-Contained Breathing Apparatus (SCBA) pass alarm check and are completely charged
- Fire extinguishers are under the correct pressure and are in good condition
- Spill Kits are in good condition and are well stocked
- The Fire suppression system is in good condition and risers are kept clear
- The facility floor is sealed and free of cracks
- Portable emergency eyewash is serviced
- Housekeeping is adequate
- Any other hazards that may exist

16.4.2. A copy of the Weekly Inspection Form is included below

16.5. Annual Inspections

16.5.1. Annual inspections are related to specific equipment that may require annual inspection and certification on an annual basis to ensure a safe environment for employees, the community and the environment. Annual inspections include:

- Fire doors
- Fire suppression system
- The facility roof
- Parking area asphalt condition
- Condition of Containment Areas

16.5.2. A copy of the Weekly Inspection Form is included below

16.6. Inspection Procedure

16.6.1. Review the previous day inspection for deficiencies that may need correction or are still in process. If a deficiency is still in process, follow up daily to check progress and document on the form.

16.6.2. Perform the inspection using the inspection form. Note any deficiencies that are discovered. In the event the deficiency can be immediately corrected. Correct the deficiency and note on the form that the deficiency was immediately corrected.

16.6.3. Once complete, review the inspection with the TSD manager in order to develop a corrective action plan for any deficiencies that cannot be immediately corrected.

16.6.4. Sign and date the form

16.6.5. File the form according to the record retention procedure.



WEEKLY INSPECTION SHEET

Inspector: _____

Signature: _____

Date: _____

Time: _____

CRITERIA/OBSERVATIONS

STATUS*
(A)/(U)

**DATE AND NATURE OF REPAIRS/
REMEDIAL ACTION AND COMMENTS**

Inspect each container storage area for the following:

• All containers are properly labeled		
• Containers are in good condition		
• No evidence of pressure or vacuum in containers		
• Pallets in use are in good condition		
• Storage racks are in good condition		
• No flammable or reactive wastes stored within 50 feet of the property line		
• Safety showers and eyewashes are in good working condition and kept clear		
• No wastes are stored on the dock(s) overnight		
• Personal Protective Equipment is available and well stocked		
• Housekeeping is adequate		

***A** = Acceptable, **U** = Unacceptable

Notes/Comments:

I certify that the above recommended action has been taken on items mentioned above and/or defective items are now satisfactory.

Supervisor: _____

Date: _____

Waste SOP 1 - Aerosols

1.1. Safety – General

- 1.1.1. Aerosol wastes contain chemicals packaged under pressure. Improper handling of aerosols can result in fire, explosion, projectile or chemical exposure. See section 1.6.6 of this SOP for additional safety warnings and safe work procedures.

1.2. Waste Description / Qualification

- 1.2.1. Aerosol cans (Aerosols) are defined as a dispenser that holds a substance under pressure and allows the substance to be released as a fine spray. Common aerosol cans that are managed at the TSD include:

- Spray Paints
- Pesticides
- Cleaners
- Automotive products
- Medicines
- Other consumer goods packaged in aerosol cans

- 1.2.2. Aerosols may be received at the TSD as Hazardous Waste, Universal Waste or Household Hazardous Waste or Non-Hazardous waste. All Aerosols wastes that are qualified for this program must have the following properties:

- The waste meets the definition of an Aerosol per this procedure
- The waste is properly characterized
- The waste contains chemical constituents and / or waste codes that are not prohibited from management at the TSD

- 1.2.3. Aerosols eligible for consolidation are assigned the following process codes in the WMSS:

- FUELS AERO
- FUELS AERO UNIVERSAL

1.3. Quality Control

1.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. QA/QC data that is generated upon receipt of the waste includes:

- 1.3.2. The containers meet the definition of an aerosol per this procedure and the profile

- The waste is contained in its original container
- The waste is properly labeled and is identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed

1.3.3. QC Steps

- Inspect the outside of the container for conditions that could be a safety hazard.

- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required.
- Open the shipping container
- Inspect the waste for the above QC parameters and Record the results of the QC on the QC Form.

1.3.4. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

1.4. Receiving

1.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

1.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

1.5. Storage

1.5.1. Storage Parameters

- The storage parameters of the waste are determined by the chemical composition of the waste.
- Flammable Aerosol wastes must be stored in Room C or Room D, which are designated as flammable / organic storage areas.

- 1.5.2. Aerosol wastes are stored in their original containers, as shipped to the TSD, unless there is a discrepancy or safety issue, in which the container may be changed by TSD personnel, in order to meet DOT requirements, or TSD requirements.

1.6. Processing

1.6.1. Packaging / Labeling

Aerosols will be consolidated into DOT shipping containers such as cubic yard boxes or drums. Each consolidated container must be immediately labeled per RCRA / DOT / TSD requirements and entered into the WMSS inventory for proper tracking.

1.6.2. Processing Method - Consolidation

Consolidating flammable waste has risk of fire, explosion or chemical exposure. All employees are required to wear the proper personal protective equipment and follow

the required safety procedures when performing consolidations. Failure to do so may cause fire, injury or death.

- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged;
- Don the required PPE for consolidation (level D);
- Open the containers of material to be consolidated;
- Transfer the waste to the receiving container. Aerosols will be processed into larger containers by hand, taking care not to discharge aerosols during handling.
- Repeat steps above until the container is completely loaded with consolidated waste; and
- Note any non-conformances or discrepancies on the Pick List as they arise.
- Universal Waste aerosols and Hazardous Waste aerosols are managed downstream as Hazardous Waste or Universal Waste as designated by the generator on the waste profile. HHW aerosols are managed as Non-RCRA waste.

1.6.3. Processing Method – Solvent Reclaim

- Aerosols may be processed into “Puncture and Reclaim” system which will allow the solvents / materials to be consolidated into a container for management as liquid fuels.
- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged;
- Don the required PPE for consolidation (level D);
- Open the shipping containers of material to be consolidated;
- Transfer the waste to the receiving container. Follow all processing equipment operating instruction and safety rules to prevent safety health and environmental hazards.
- Repeat steps above until the receiving container is completely loaded with consolidated waste; and
- Note any non-conformances or discrepancies on the Pick List as they arise.

1.6.4. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) to the receiving container location after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

1.6.5. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

1.6.6. Processing Safety

- Aerosol wastes can be flammable, corrosive or toxic, take care not to accidentally discharge aerosol waste during handling, which can create a fire, injury or environmental hazard.
- ***No spark generating tools or equipment is allowed in the processing area when consolidation is in progress***
- Follow all safety rules for processing equipment when operating.
- Manual handling of Aerosols can cause strains / sprains. Use safe lifting techniques and proper tools to help prevent injuries.
- Level D PPE is required for all employees involved in consolidating waste to provide cross contamination protection. The following Level D personal protective equipment is required at a minimum:
 - Eye Protection
 - Disposable apron or Tyvek suit
 - Chemical protective gloves

Waste SOP 2 - Battery Wastes (Universal Waste)

2.1. Safety – General

- 2.1.1. The Hazardous Materials contained in Battery Wastes can injury or environmental damage if not handled properly. See section 2.6.5 of this SOP for additional safety warnings and safe work procedures.

2.2. Waste Description / Qualification

- Battery Wastes are defined as batteries that are no longer needed for service or have been spent. Battery wastes are typically shipped to and received by the TSD as universal waste. Many of the Battery wastes shipped to the TSD contain metals such as cadmium, nickel and lead which can be hazardous if released. Common types of Battery wastes that are managed at the TSD include but are not limited to:
 - Lead-acid batteries
 - Nickel-cadmium batteries
 - Alkaline batteries
 - Mercury containing batteries
 - Lithium batteries

2.2.1. Battery Wastes may be received at the TSD as Hazardous Waste (if broken and contains a hazardous constituent) or Non-Hazardous / Universal waste (if not broken and intact). All Battery wastes that are qualified for this program must meet the following requirements:

 - The waste meets the definition of a battery eligible for management at the TSD
 - The waste is properly characterized
 - The waste is managed per the Universal Waste management rules set forth in 40 CFR Part 262. (Broken batteries are managed at the TSD as hazardous waste)
 - Each container has been reviewed and approved for shipment to the TSD

2.2.2. Battery waste eligible for consolidation are assigned the following process codes in the WMSS:

 - Univ Bat Lith
 - Univ Bat NiCad
 - Univ Bat Lead
 - Univ Bat Alk
 - Univ Bat Merc

2.3. Quality Control

2.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a Battery waste per this procedure and the profile
- The waste is properly labeled and identified

- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed

2.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard
- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Batteries that are broken during transportation should be handled as described in 2.6.2, below.
- Inspect the waste for the above QC parameters and Record the results of the QC on the QC Form.

2.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

2.4. Receiving

2.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

2.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

2.5. Storage

2.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

2.5.2. Corrosive Battery wastes must be stored in Room E (alkaline) or Room F (acid and all other batteries)

2.5.3. Other batteries which are Class 9 or non-DOT regulated wastes may be stored in any room

2.6. Processing instructions

2.6.1. Packaging / Labeling

- Battery wastes are consolidated into shipping containers that are acceptable to properly contain the Battery waste and prevent breakage. Each consolidated

container must be immediately labeled per RCRA / DOT / TSD requirements as Universal Waste and entered into the WMSS inventory for proper tracking.

- Universal wastes that are hazardous materials under 49 CFR 171 through 180 must comply with DOT labeling requirements

2.6.2. Processing Method - Consolidation

Consolidating Battery waste has risk of fire, chemical exposure and environmental contamination. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause exposure, injury or illness.

- Dry batteries greater than 9 volts, all lithium batteries and wet cell batteries, should always be protected against short circuit or prevented from becoming oriented in a manner that allowed the creating of a circuit and packaged in a manner that prevents excessive movement. This will eliminate a short from occurring and the dangerous evolution of heat. This can be completed by taping all terminals or contacts with electrical tape or contact covers. When using tape to effectively insulate batteries, ensure that marking remain visible to aid in the identification of batteries downstream.
- Do not use metal drums to pack lead acid batteries.
- Do not lay batteries on their side as leaking will occur.
- Containers larger than 5-gallons in size must be secured to pallets for shipping.
NOTE:
- Containers for Lithium, Lithium Ion and Magnesium batteries are limited to 5-gallons in size (66 pound gross weight per container).
- All batteries must be kept DRY. However, do not package batteries with vermiculite, desiccant, or other packaging material.
- All batteries must be segregated by DOT compatibility and packaged in accordance with USDOT regulations.
- Large batteries should be uniformly stacked, layered with insulation and secured or banded onto their pallets.
- Leaking batteries must be packaged as follows:
 - Separate all free liquid from battery casing. This liquid should be placed in a poly 1H1 drum or other DOT container compatible with the battery liquid.
 - Place the battery carcasses in a poly drum liner (4 mil thickness) and place in a poly 1H2 5

2.6.3. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.

- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the receiving container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

2.6.4. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

2.6.5. Processing Safety

- Battery wastes can cause fire if not properly packaged. Batteries are also toxic and harmful to the environment. Take care not to accidentally break Battery wastes during handling, which can create injury or environmental hazard.
- Use care when handling broken batteries to avoid chemical exposure injury
- Consolidation of battery wastes may be done inside of the warehouse as there is no intentional handling of open waste containers.
- In the event of a broken battery is discovered:
 - Move the container to a well-ventilated and contained area for processing.
 - Wear appropriate personal protective equipment, such as a respirator and leather gloves to keep vapors or dust from being inhaled or contacting your skin.
 - Follow section 6.2.9 of this procedure for packaging instructions.
- Use care if opening Battery waste containers during consolidation. Inner containers can be damaged / broken during transportation.
- Level D PPE is normally required for all employees involved in consolidating waste to provide cross contamination protection. In the event of a broken battery, a higher level of protection may be required depending on the hazards associated with the broken battery. A Health and Safety evaluation is necessary prior to repackaging.

Waste SOP 3 - Electronic Wastes (Universal Waste)

3.1. Safety – General

- 3.1.1. The Hazardous Materials contained in Electronic Wastes can injury or environmental damage if not handled properly. See section 3.6.5 of this SOP for additional safety warnings and safe work procedures.

3.2. Waste Description / Qualification

- Electronic Wastes are defined as electrical devices that are no longer needed for service or have been spent. Electronic wastes are typically shipped to and received by the TSD as universal waste. Many of the Electronic wastes shipped to the TSD contain metals such as cadmium, nickel, silver and lead which can be hazardous to health and environment if released. Common types of Electronic wastes that are managed at the TSD include but are not limited to:
 - Computers
 - Monitors
 - Printers
 - Any other electronic equipment
- 3.2.1. Electronic Wastes may be received at the TSD as Universal waste. All Electronic wastes that are qualified for this program must meet the following requirements:
 - The waste meets the definition of Electronic waste per section 2.1
 - The waste is properly characterized
 - The waste is managed per the Universal Waste management rules set forth in 40 CFR Part 262.
 - Each waste profile has been reviewed and approved for shipment to the TSD
- 3.2.2. Electronic waste eligible for consolidation are assigned the following process codes in the WMSS:
 - Univ E-Waste
 - Univ CPU's
 - Univ NonPCB Ballast

3.3. Quality Control

3.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of an Electronic waste per this procedure and the profile
- The waste is properly labeled and identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed

3.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard
- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Items that are broken during transportation should be left in the container they arrived in, and the package should be sealed to prevent any material from spilling.
- Inspect the waste for the above QC parameters and Record the results of the QC on the QC Form.

3.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

3.4. Receiving

3.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

3.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

3.5. Storage

- 3.5.1. Electronic wastes are normally shipped as Class 9 or non-DOT regulated and may be stored in any room

3.6. Processing instructions

3.6.1. Packaging / Labeling

- Electronic wastes are consolidated into shipping containers or are palletized in a manner that is acceptable to properly contain the waste and prevent breakage. Each consolidated container must be immediately labeled per RCRA / DOT / TSD requirements as Universal Waste and entered into the WMSS inventory for proper tracking.
 - Palletizing is the most efficient way to prepare large quantities of waste electrical and electronic equipment for shipment.
 - Smaller quantities can be packaged in boxes, small crates or as individual pieces
- Universal wastes that are hazardous materials under 49 CFR 171 through 180 must comply with DOT labeling requirements.

3.6.2. Processing Method - Shipment

- If shipping via a Bill of Lading, attach a universal waste label to the container.
- Universal wastes that are hazardous materials under 49 CFR 171 through 180 must comply with DOT labeling requirements.

3.6.3. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

3.6.4. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

3.6.5. Processing Safety

- Electronic waste can be toxic and harmful to the environment. Take care not to accidentally break Battery wastes during handling, which can create injury or environmental hazard.
- Use care when handling electronics to avoid injury
- Consolidation of electronic wastes may be done inside of the warehouse as there is no intentional handling of open waste containers.
- Use care if opening Electronic waste containers during consolidation. Inner containers can be damaged / broken during transportation.
- Level D PPE is normally required for all employees involved in consolidating waste to provide cross contamination protection.

Waste SOP 4 - Labpack Consolidation

4.1. Safety – General

- 4.1.1. The Hazardous Materials contained in Labpack drums can cause fire, injury, death or environmental damage if not handled properly. See section 4.6.5 of this SOP for additional safety warnings and safe work procedures.

4.2. Waste Description / Qualification

- Labpacks are defined as a containerized chemical wastes that are packaged into a secondary container for transportation and disposal. Labpacks often contain more than one container of chemical, and are segregated by DOT hazard class and other hazard characteristics as defined by regulation and policy. Common Labpacks that are managed at the TSD include Laboratory and industrial chemicals that are spent or expired.
- 4.2.1. Labpacks may be received at the TSD as Hazardous Waste or Non-Hazardous waste. The hazards associated with Labpacks can vary, as they may be corrosive, flammable, reactive and toxic All Labpacks that are qualified for this program must meet the following requirements:
- The waste is qualified for Labpack transportation and disposal per DOT and RCRA regulation
 - Each inner container is adequately identified
 - Each drum contains inner containers that are compatible with each other per DOT, RCRA regulation, chemical properties and final TSD requirements
 - Each drum has been reviewed and approved for shipment to the TSD
- 4.2.2. Labpacks eligible for consolidation are assigned the following process codes in the WMSS:
- LP Non-Reactive
 - LP Reactive
 - LP Lithium

4.3. Quality Control

4.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a Labpack per this procedure and the profile
- The waste is properly labeled and identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed

4.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard

- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Inspect the container for Labpack inventory attachments. For Labpacks that do not have the inventory attached, report to the TSD Operations Manager for retrieval of the inventory sheets from the profile documentation.
- Inspect the waste for the above QC parameters and Record the results of the QC on the QC Form.

4.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

4.4. Receiving

4.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

4.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

4.5. Storage

4.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

4.5.2. Labpack waste will be stored as described in **Facility SOP 7.3. Waste Segregation**

4.6. Processing instructions

4.6.1. Packaging / Labeling

- Labpacks are consolidated into DOT shipping containers. Each consolidated container must be immediately labeled per RCRA / DOT / TSD requirements and entered into the WMSS inventory for proper tracking.

4.6.2. Processing Method - Consolidation

Consolidating Labpack waste has risk of fire, explosion or chemical exposure. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause fire, injury or death.

- Labpack activities will be conducted by employees with experience and training to perform Labpack tasks safely and effectively, referred to as Labpack Chemists
- Segregation of materials will be supervised by an experienced Labpack Chemist. Materials will be segregated based on hazard characteristics, chemical compatibility, liquid or solid, specific TSDF criteria, and DOT requirements.
- The Labpack Chemist(s) must be aware of materials that require special or specific attention. Examples of these types of materials are explosives, organic peroxides, self-reactive materials, reactive materials, mercury, controlled substance, poison-inhalation hazards, temperature sensitive, shock-sensitive materials, etc. Most of these materials require either special/specific packaging, dilution, specific TSDF requirements, separate profile, and in some cases manifested separately.
- After segregation, an inventory will be completed / consolidated on a lab pack inventory sheet per drum.
- All the requested information on the lab pack inventory sheet must be filled out completely.
 - When listing the inventory on the lab pack inventory sheet, be very specific with chemical concentrations and percentages when listing the material (e.g. Nitric Acid 70% aqueous, or Butyllithium 1.0M solution in hexanes).
 - Materials such as PIH's, stenches, materials with water added should be placed in a zip lock bag or a sealable container prior to being placed into a drum or pail. This information should also be added to the lab pack inventory sheet as a special note or provision (e.g. mercaptoethanol, double bagged).
- Packing of the material should begin during or after a lab pack inventory sheet is completed. The appropriate container must be chosen based on hazard class, chemical compatibility, packing group, and special packaging requirements per DOT. For example, corrosive material should not be packed in metal containers based on chemical compatibility.
 - Drum rating is important! ACT uses X or Y rated drums. Materials in DOT Packing Group II and III can be packed in Y-rated OR X-rated containers. However, materials in DOT Packing Group I can only be packed in X-rated containers.
 - Some examples of Packing Group I materials are Poison-Inhalation Hazards (PIH), water-reactive materials, pyrophorics, cyanides, etc.

Once the proper container has been selected pour compatible absorbent into the bottom of the container as required by DOT, then add materials. Ensure that:

- All materials stand right side up
- All containers are completely labeled
- All containers are completely sealed
- There is space between glass containers and layers so that compatible absorbent can be poured into the gaps between glass to prevent breakage
- After all the material is placed into a container, fill with compatible absorbent until the drum is completely filled.

The project lead and/or field chemist will assign a drum number to each container and list the drum number on the lab pack inventory sheet accordingly.

- Leave a carbon copy of the lab pack inventory sheet with the container. All other carbon copies will be given to the project lead and/or field chemist for profiling.

The following items will be placed on each drum:

- DOT markings and labels
- Drum number
- Lab pack inventory sheet placed on the outside of the container inside the packaging slip (leave the packing slip open on one side for modifications)

4.6.3. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

4.6.4. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

4.6.5. Processing Safety

- Labpack wastes can be flammable, reactive, corrosive and toxic. Take care not to accidentally release Labpack waste during handling, which can create a fire, injury or environmental hazard.
- **Note - Every effort should be made to ensure that the Labpack Chemist(s) can be clearly seen by at least one other individual in case of an accidental spill/exposure during segregation and processing. ALWAYS LOOK OUT FOR ONE ANOTHER! Safety is our main priority.**
- Consolidation of Labpack wastes may be done inside of the warehouse as there is no intentional handling of open waste containers. If a broken or open container is discovered, the container should be moved to a well-ventilated area for processing. Additional PPE will be necessary. Evaluate the hazard of the potentially released chemical for the appropriate PPE.
- Use care when opening Labpack containers during consolidation. Inner containers can be damaged / broken during transportation.
- Level D PPE is normally required for all employees involved in consolidating waste to provide cross contamination protection. In the event of a broken container, the following Level C personal protective equipment is required at a minimum:
 - Air purifying respirator (full face)

- Disposable apron or Tyvek suit
- Chemical protective gloves

Note – Many Labpacks contain chemicals with a high degree of hazard and higher levels of personal protection may be required depending on the nature of the hazard and circumstances.

Waste SOP 5 - Lamp Wastes (Universal Waste)

5.1. Safety – General

- 5.1.1. The Hazardous Materials contained in Lamps can injury or environmental damage if not handled properly. See section 5.6.7 of this SOP for additional safety warnings and safe work procedures.

5.2. Waste Description / Qualification

Lamp Wastes are defined as wastes that contain lamps of various types and are typically shipped to and received by the TSD as universal waste. Many of the lamps shipped to the TSD contain metals such as mercury and sodium, which can be hazardous if released. Common types of lamps that are managed at the TSD include:

- Fluorescent lamps
- High pressure sodium lamps
- HID lamps of various types

- 5.2.1. Lamp Wastes may be received at the TSD as Hazardous Waste (if broken and contains a hazardous constituent) or Non-Hazardous / Universal waste (if not broken and intact). All Lamp wastes that are qualified for this program must meet the following requirements:

- The waste meets the definition of a Lamp per the description in this procedure
- The waste is properly characterized
- The waste is managed per the Universal Waste management rules set forth in 40 CFR Part 262.
- Each container has been reviewed and approved for shipment to the TSD

- 5.2.2. Lamp waste eligible for consolidation are assigned the following process codes in the WMSS:

- Univ 4' Tubes
- Univ 8' Tubes
- Univ CFL's
- Univ U/Cir Tubes
- Univ HID's

5.3. Quality Control

5.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a Lamp waste per this procedure and the profile
- The waste is properly labeled and identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed

5.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard
- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Lamps that are broken during transportation should be left in the container they arrived in, and the package should be sealed to prevent any material from spilling.
- Inspect the waste for the above QC parameters and Record the results of the QC on the QC Form.

5.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

5.4. Receiving

5.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

5.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

5.5. Storage

5.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

5.5.2. Lamp wastes must be stored in Room E or Room F, which are designated as areas acceptable for Lamp wastes

5.5.3. Class 9 and non-DOT regulated wastes may be stored in any room

5.6. Processing instructions

5.6.1. Processing Location

- Lamp waste consolidation may take place in any of the rooms designated for storage of lamp wastes, or on the docks.

5.6.2. Packaging / Labeling

- Lamp wastes are consolidated into shipping containers that are acceptable to properly contain the Lamp waste and prevent breakage. Each consolidated

container must be immediately labeled per RCRA / DOT / TSD requirements as Universal Waste and entered into the WMSS inventory for proper tracking.

- Universal wastes that are hazardous materials under 49 CFR 171 through 180 must comply with DOT labeling requirements.

5.6.3. Processing Method - Consolidation

Consolidating Lamp waste has risk of chemical exposure and environmental contamination. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause exposure, injury or illness.

- Lamp wastes may be consolidated individually by lamp, or by original shipping container into larger containers such as drums or cubic yard boxes.
- The following items will be placed on each drum:
- DOT markings and labels
- Drum number
- Lab pack inventory sheet placed on the outside of the container inside the packaging slip (leave the packing slip open on one side for modifications)

5.6.4. Processing Method - Crushing

- Lamp wastes may be consolidated into a "Bulb Eater" system which will safely crush the bulbs into a drum which will be managed as hazardous waste.
- Broken fluorescent lamps or crushed lamps are to be managed as hazardous waste, and must be packaged and shipped per the requirements of 49 CFR 171 through 180 as hazardous materials.
- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged;
- Don the required PPE for consolidation (level D);
- Open the shipping containers of material to be consolidated;
- Transfer the waste to the receiving container. Follow all processing equipment operating instruction and safety rules to prevent safety health and environmental hazards.
- Repeat steps above until the receiving container is completely loaded with consolidated waste; and
- Note any non-conformances or discrepancies on the Pick List as they arise.

5.6.5. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) after they are transferred to the consolidation container. This will ensure tracking of the waste to the receiving container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.

- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

5.6.6. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

5.6.7. Processing Safety

- Lamp wastes can be toxic and harmful to the environment. Take care not to accidentally break Lamp waste during handling, which can create injury or environmental hazard.
- Many Lamp wastes have poor warning properties in the event of a release or contamination. Never rely on odor as a warning property for wastes which may contain mercury, as it has no odor.
- Use care when handling broken lamps to avoid injection injury
- Consolidation of Lamp wastes may be done inside of the warehouse as there is no intentional handling of open waste containers.
- In the event of a broken lamp is discovered:
 - Move the container to a well-ventilated and contained area for processing.
 - Wear appropriate personal protective equipment, such as a respirator and leather gloves to keep bulb dust and glass from being inhaled or contacting your skin.
 - Carefully remove the larger pieces and place them in a secure closed container.
 - Collect the smaller pieces and dust. It is recommended that you use two stiff pieces of paper such as index cards or a mercury spill kit.
 - Put all material into a sealed container. Pat the area with the sticky side of duct tape, packing tape or masking tape. Wipe the area with a damp cloth.
 - Put all waste and materials used to clean up the bulb in a secure closed container and label it "Universal Waste - broken lamp". Additional PPE may be necessary. Evaluate the hazard of the potentially released chemical for the appropriate PPE.
- Use care if opening Lamp waste containers during consolidation. Inner containers can be damaged / broken during transportation.
- Level D PPE is normally required for all employees involved in consolidating waste to provide cross contamination protection. In the event of a broken container, the following Level C personal protective equipment is required at a minimum:
 - Air purifying respirator (full face)
 - Disposable apron or Tyvek suit
 - Chemical protective gloves

Waste SOP 6 - Landfill Liquids

6.1. Safety – General

- 6.1.1. Landfill Liquids can cause injury, death or environmental damage if not handled properly. See section 6.5 of this SOP for additional safety warnings and safe work procedures.

6.2. Waste Description / Qualification

- 6.2.1. Landfill Liquids are defined as a liquid material that is eligible for disposal by landfill, with additional treatment such as solidification or stabilization depending on the waste characteristics and regulatory rules. Common Landfill Liquids that are managed at the TSD include:

- Non RCRA regulated low BTU liquids
- RCRA regulated low BTU liquids
- Corrosive bases and acids
- Other liquids that are accepted at the TSD that can legally be disposed of in a landfill

- 6.2.2. Landfill Liquids may be received at the TSD as RCRA Hazardous Waste or Non – RCRA waste. All Landfill Liquids that are qualified for this program must have the following properties:

- The waste is non-RCRA regulated or
- The waste is RCRA regulated but authorized for Landfill per the downstream TSD permit, either with or without additional treatment and the final TSD

- 6.2.3. Landfill Liquids eligible for consolidation are assigned the following process codes in the WMSS:

- LF Liq Non-Haz
- LF Liq Acid
- LF Liq Base
- LF Liq RCRA

6.3. Quality Control

6.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meets the description of the waste per the approved profile
- The waste is properly labeled and is identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed
- pH
- Layers

- Color
- % Water
- Sludge

6.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard
- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Open the container
- Inspect the waste for the above physical QC parameters using a coliwasa or similar sampling device and Record the results of the QC on the QC Form
- Conduct a chemical analysis as needed (pH, % water) on a representative number of containers using the “cube root” procedure, as described in WAP Section 4.2

6.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

6.4. Receiving

6.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

6.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

6.5. Storage

6.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

6.5.2. Landfill Liquid wastes must be stored in the appropriate warehouse room based on the DOT hazard class and compatibility chart, when applicable.

6.5.3. Class 9 and non-DOT regulated wastes may be stored in any room

6.6. Processing instructions

6.6.1. Packaging / Labeling

- Landfill Liquids are consolidated into DOT shipping containers such as drums, totes or tank trucks. Each consolidated container must be immediately labeled per RCRA

/ DOT / TSD requirements and entered into the WMSS inventory for proper tracking.

6.6.2. Processing Method - Consolidation

Consolidating Landfill Liquid waste has risk of chemical exposure due to chemical contaminants and potential for dust. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause injury or death.

- The HWC will provide a list of containers identified for consolidation. Only the containers on the list provided are allowed to be consolidated. Additions to the Pick List will require approval by the HWC or Operations Manager after review of the waste profile.
- Stage and prepare the receiving container(s) as needed.
- Stage and prepare the containers designated for consolidation, but leave the container openings closed / covered until consolidation to minimize emissions from the containers.
- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged;
- Don the PPE required in Section 6.5.6;
- Open the containers of material to be consolidated;
- Transfer the waste to the receiving container;
- Repeat steps above until the container is completely loaded with consolidated waste; and
- Note any non-conformances or discrepancies on the Pick List as they arise.

6.6.3. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) to the bulk location after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

6.6.4. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

6.6.5. Processing Safety

- Landfill Liquid waste can be toxic or harmful. Take care not to accidentally release the waste during handling, which can create injury or environmental hazard. Keep the work area clean and free of spilled waste.
- Clean up small spill and drips immediately
- Consolidation of Landfill Liquid wastes must be done outside of the warehouse, on the docks to allow for proper ventilation
- Follow all safety rules for processing equipment when operating
- Manual handling of Landfill Liquid containers can cause strains / sprains. Use safe lifting techniques and proper tools to help prevent injuries.
- Level D PPE is required for all employees involved in consolidating waste to provide cross contamination and exposure protection. The following Level D personal protective equipment is required at a minimum:
 - Eye Protection
 - Disposable apron or Tyvek suit
 - Chemical protective gloves
- When consolidating RCRA regulated Landfill Liquids or any other Landfill Liquids that may constitute a respiratory hazard, Level C protection is required:
 - Full Face Air Purifying Respirator
 - Disposable apron or Tyvek suit
 - Chemical protective gloves

Waste SOP 7 - Landfill Solids

7.1. Safety – General

- 7.1.1. Landfill Solids can cause injury, death or environmental damage if not handled properly. See section 7.6.6 of this SOP for additional safety warnings and safe work procedures.

7.2. Waste Description / Qualification

- 7.2.1. Landfill Solids are defined as a solid material that is eligible for disposal by landfill, either with additional treatment or without additional treatment, depending on the waste characteristics and regulatory rules. Common Landfill Solids that are managed at the TSD include:

- Debris with or without contaminants
- Production trash
- Lab trash
- Filters and medias
- Other solids that are generated but can legally be disposed of in a landfill

- 7.2.2. Landfill Solids may be received at the TSD as Hazardous Waste or Non-Hazardous waste. All Landfill Solids that are qualified for this program must have the following properties:

- The waste contains no free liquid
- The waste is non-RCRA regulated
- The waste is RCRA regulated but authorized for Landfill either with or without additional treatment and the final TSD

- 7.2.3. Landfill Solids eligible for consolidation are assigned the following process codes in the WMSS:

- LF Solids RCRA
- LF Solids NH

7.3. Quality Control

7.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked to and evaluation is performed ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a Landfill Solid per this procedure
- The waste meets the description of the waste per the approved profile
- The waste is properly labeled and is identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed

7.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard
- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Open the container
- Inspect the waste for the above QC parameters and Record the results of the QC on the QC Form.

7.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

7.4. Receiving

7.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

7.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

7.5. Storage

7.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

7.5.2. Landfill Solids wastes must be stored in the appropriate warehouse room based on the DOT hazard class and compatibility chart, when applicable.

7.5.3. Class 9 and non-DOT regulated wastes may be stored in any room

7.6. Processing instructions

7.6.1. Processing Location

- Landfill Solids consolidation is allowed at the back dock, south dock, north dock or other location where a receiving container can safely be placed in proximity of the operation.

7.6.2. Packaging / Labeling

- Landfill Solids are consolidated into DOT shipping containers such as cubic yard boxes or roll-off containers. Each consolidated container must be immediately

labeled per RCRA / DOT / TSD requirements and entered into WMSS inventory for proper tracking.

7.6.3. Processing Method - Consolidation

Consolidating Landfill Solids waste has risk of chemical exposure due to chemical contaminants and potential for dust. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause injury or death.

- The HWC will provide a list of containers identified for consolidation. Only the containers on the list provided are allowed to be consolidated. Additions to the Pick List will require approval by the HWC or Operations Manager after review of the waste profile.
- Stage and prepare the receiving container(s) as needed.
- Stage and prepare the containers designated for consolidation, but leave the container openings closed / covered until consolidation to minimize emissions from the containers.
- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged
- Don the PPE required in Section 6.6.7.
- Open the containers of material to be consolidated
- Transfer the waste to the receiving container or equipment
 - Landfill Solids may also be processed into compaction or shredding systems which will allow the materials to be consolidated into a container for efficient transportation of the waste.
- For compaction or shredding, the material must be transferred to the processing equipment using all applicable ACTreatment SOPs, processing equipment operating instruction, and safety rules to prevent safety health and environmental hazards.
- Repeat steps above until the container is completely loaded with consolidated waste
- Note any non-conformances or discrepancies on the Pick List as they arise.

7.6.4. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) to the bulk location after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

7.6.5. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

7.6.6. Processing Safety

- Landfill Solids waste can toxic or harmful. Take care not to accidentally release the waste during handling, which can create injury or environmental hazard. Keep the work area clean and free of loose waste.
- Consolidation of Landfill Solids wastes must be done outside of the warehouse, on the docks to allow for proper ventilation
- Follow all safety rules and procedures for processing equipment when operating.
- Never operate shredding or compaction equipment without all guards and interlocks in place, and never bypass an interlock or guarding device, as it can result in serious injury or death. **Always follow the SOP for the equipment!**
- Manual handling of Landfill Solids can cause strains / sprains. Use safe lifting techniques and proper tools to help prevent injuries.
- Many Landfill Solids can be sharp, use tools instead of hands to move waste to the consolidation container.
- Level D PPE is required for all employees involved in consolidating waste to provide cross contamination protection. The following Level D personal protective equipment is required at a minimum:
 - Eye Protection
 - Disposable apron or Tyvek suit
 - Chemical protective gloves
- When consolidating RCRA regulated Landfill solids or any other Landfill Solids that may constitute a respiratory hazard, Level C protection is required:
 - Full Face Air Purifying Respirator
 - Disposable apron or Tyvek suit
 - Chemical protective gloves
- Many Landfill Solids can be dusty. Use light water spray from pump sprayers to help minimize dust emissions.

Waste SOP 8 - Liquid Fuels

8.1. Safety – General

- 8.1.1. Liquid Fuels (Flammable Liquids) can cause fire, injury, death or environmental damage if not handled properly. See section 8.6.5 of this SOP for additional safety warnings and safe work procedures.

8.2. Waste Description / Qualification

- 8.2.1. Liquid Fuels are defined as a liquid material that has fuel value greater than 5000 BTU. Common Liquid Fuels that are managed at the TSD include:

- Laboratory or Industrial Solvent wastes
- Motor Fuels and lubricants
- Automotive products
- Other organic liquids that may have greater than 5000 BTU fuel value.

- 8.2.2. Liquid Fuels may be received at the TSD as Hazardous Waste or Non-Hazardous waste. All Liquid Fuels that are qualified for this program must have the following properties:

- The waste is liquid
- The waste is organic and/or petroleum based
- The waste is not corrosive as defined in 40 CFR 261.22
- The waste has a minimum of 5000 BTU fuel value as certified by the generator
- The waste has a water content below 40%

- 8.2.3. Flammable liquids eligible for consolidation are assigned the following process codes in the WMSS:

- Fuels Liq >5000
- Fuels Liq >5000 halogens
- Fuels Liq <50 Solid
- Fuels Liq >50 Solid

8.3. Quality Control

8.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a Liquid Fuel per this procedure and the profile
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed
- The waste is properly labeled and is identified
- pH
- Layers
- Color

- % Water
- Sludge

8.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard
- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Open the container
- Inspect the waste for the above physical QC parameters using a coliwasa or similar sampling device and Record the results of the QC on the QC Form
- Conduct a chemical analysis as needed (pH, % water) on a representative number of containers using the "cube root" procedure, as described in WAP Section 4.2

8.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

8.4. Receiving

8.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

8.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

8.5. Storage

8.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

8.5.2. Flammable Liquid wastes must be stored in Room C or Room D, which are designated as flammable / organic storage areas.

8.5.3. Optional storage may be in tanks, if the TSD is equipped to do so.

8.6. Processing instructions

8.6.1. Packaging / Labeling

- Liquid Fuels are consolidated into DOT shipping containers such as totes or tank trailers. Each consolidated container must be immediately labeled per RCRA / DOT / TSD requirements and entered into the WMSS inventory for proper tracking.

8.6.2. Processing Method - Consolidation

Consolidating flammable waste has risk of fire, explosion or chemical exposure. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause fire, injury or death.

Liquid Fuel consolidation is only allowed at the south dock or other suitable location where a certified grounding system is in place.

- Liquid fuels consolidation must take place in a 24 hour period once consolidation into the receiving container has started. Note the start date / time and finish date / time on the consolidation form.
- The HWC will provide a list of containers identified for consolidation. Only the containers on the list provided are allowed to be consolidated. Additions to the Pick List will require approval by the HWC or Operations Manager after review of the waste profile.
- Stage and prepare the receiving container(s) as needed.
- Stage and prepare the containers designated for pumping, but leave the container openings closed / covered until pumping to minimize emissions from the containers.
- Ground and bond containers as described in Section 8.6.5
- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged;
- Don the PPE required in Section 8.6.5;
- Open the containers of material to be consolidated;
- Transfer the waste to the receiving container;
- Repeat steps above until the container is completely loaded with consolidated waste; and
- Note any non-conformances or discrepancies on the Pick List as they arise.

8.6.3. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) to the bulk location after they are transferred to the consolidation container. This will ensure tracking of the waste to the tanker load.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

8.6.4. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.

- Empty containers need to be de-faced, labeled as “EMPTY” and dated then sent for recycling or disposal within one year.

8.6.5. Processing Safety

- Liquid Fuel wastes can be flammable and toxic. Take care not to accidentally release liquid fuel waste during handling, which can create a fire, injury or environmental hazard.
- **No spark generating tools or equipment is allowed in the processing area when consolidation is in progress**
- Consolidation of Liquid Fuel wastes must be done outside of the warehouse, on the south dock or other suitable location to allow for proper ventilation
- Follow all safety rules for processing equipment when operating.
- Manual handling of liquid fuels can cause strains / sprains. Use safe lifting techniques and proper tools to help prevent injuries.
- Level C PPE is required for all employees involved in consolidating waste to provide chemical splash protection and respiratory protection. The following Level C personal protective equipment is required at a minimum:
 - Air purifying respirator (full face)
 - Splash apron
 - Solvent protective gloves
- Bonding and grounding is required when consolidating flammable liquids. Bonding and grounding prevents the buildup of static electricity that could cause a fire or explosion when pumping or pouring flammable liquids. Serious injury or death could occur from explosion if bonding and grounding procedures are not followed!
 - Bonding is completed by attaching a bond wire from the dispensing container to the receiving container. This creates a path for the static electricity to flow.
 - Grounding is completed by connecting the dispensing container to a common ground. The common ground is connected to an earth ground. This system provides an electrical pathway for the static electricity to follow and be dissipated by the ground.
 - The work area for tanker loading is equipped with a certified ground, where containers and tank trailers may be grounded.
 - To be effective, bonding and grounding connections should be metal to metal between the containers and the cables. To get a good connection all paint, dirt and rust must be removed from the spots where the cable clamps will be attached.
 - See below for grounding rod illustrations.



Figure 1 - Grounding Rod on South Dock



Figure 2 - Tanker Connected to Grounding Rod



Figure 3 - Container Connected to Grounding Reel

Waste SOP 9 - Low BTU organic Liquids

9.1. Safety – General

- 9.1.1. Low BTU organic Liquids (which are commonly flammable) can cause fire, injury, death or environmental damage if not handled properly. See section 9.6.5 of this SOP for additional safety warnings and safe work procedures.

9.2. Waste Description / Qualification

- 9.2.1. Low BTU organic Liquids are defined as a liquid material that is organic, or has significant organic constituents and has fuel value less than 5000 BTU. Common Low BTU organic Liquids that are managed at the TSD include:

- Laboratory or Industrial Solvent wastes
- Water / Solvent Mixtures
- Some HPLC wastes
- Other organic liquids that may have less than 5000 BTU fuel value.

- 9.2.2. Low BTU organic Liquids may be received at the TSD as Hazardous Waste or Non-Hazardous waste. All Low BTU organic Liquids that are qualified for this program must have the following properties:

- The waste is liquid
- The waste is contains organic and/or petroleum based constituents
- The waste is not corrosive as defined in 40 CFR 261.22
- The waste has less than 5000 BTU fuel value as certified by the generator

- 9.2.3. Low BTU organic Liquids eligible for consolidation are assigned the following process codes in the WMSS:

- FUELS LIQ 2500-5000
- FUELS LIQ 0-2500

9.3. Quality Control

9.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a Liquid Fuel per this procedure and the profile
- The waste is properly labeled and is identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed
- pH
- Layers
- Color
- Sludge

9.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard
- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Open the container
- Inspect the waste for the above physical QC parameters using a coliwasa or similar sampling device and Record the results of the QC on the QC Form
- Conduct a chemical analysis as needed (pH, % water) on a representative number of containers using the "cube root" procedure, as described in WAP Section 4.2

9.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

9.4. Receiving

9.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

9.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

9.5. Storage

- The storage parameters of the waste are determined by the chemical composition of the waste.
- Low BTU organic Liquids wastes must be stored in Room C or Room D, which are designated as flammable / organic storage areas.

9.6. Processing instructions

9.6.1. Packaging / Labeling

- Low BTU organic Liquids are consolidated into DOT shipping containers such as totes or tank trailers. Each consolidated container must be immediately labeled per RCRA / DOT / TSD requirements and entered into the WMSS inventory for proper tracking.

9.6.2. Processing Method - Consolidation

Consolidating Low BTU organic Liquids waste has risk of fire, explosion or chemical exposure. All employees are required to wear the proper personal protective

equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause fire, injury or death.

Low BTU organic Liquids consolidation is only allowed at the south dock or other suitable location where a certified grounding system is in place.

- The HWC will provide a list of containers identified for consolidation (see appendix A for a sample Pick List). Only the containers on the list provided are allowed to be consolidated. Additions to the Pick List will require approval by the HWC or Operations Manager after review of the waste profile.
- Stage and prepare the receiving container(s) as needed.
- Stage and prepare the containers designated for pumping, but leave the container openings closed / covered until pumping to minimize emissions from the containers.
- Ground and bond containers as described in Section 9.6.5
- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged;
- Don the PPE required in Section 9.6.5;
- Open the containers of material to be consolidated;
- Transfer the waste to the receiving container;
- Repeat steps above until the container is completely loaded with consolidated waste; and
- Note any non-conformances or discrepancies on the Pick List as they arise.

9.6.3. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) to the bulk location after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

9.6.4. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

9.6.5. Processing Safety

- Low BTU organic Liquids wastes can be flammable and toxic. Take care not to accidentally release liquid fuel waste during handling, which can create a fire, injury or environmental hazard.
- ***No spark generating tools or equipment is allowed in the processing area when consolidation is in progress***
- Consolidation of Low BTU organic Liquids wastes must be done outside of the warehouse, on the south dock or other suitable location to allow for proper ventilation
- Follow all safety rules for processing equipment when operating.
- Manual handling of Low BTU organic Liquids can cause strains / sprains. Use safe lifting techniques and proper tools to help prevent injuries.
- Level C PPE is required for all employees involved in consolidating waste to provide chemical splash protection and respiratory protection. The following Level C personal protective equipment is required at a minimum:
 - Air purifying respirator (full face)
 - Splash apron
 - Solvent protective gloves
- Bonding and grounding is required when consolidating flammable liquids. Bonding and grounding prevents the buildup of static electricity that could cause a fire or explosion when pumping or pouring flammable liquids. Serious injury or death could occur from explosion if bonding and grounding procedures are not followed!
 - Bonding is completed by attaching a bond wire from the dispensing container to the receiving container. This creates a path for the static electricity to flow.
 - Grounding is completed by connecting the dispensing container to a common ground. The common ground is connected to an earth ground. This system provides an electrical pathway for the static electricity to follow and be dissipated by the ground.
 - The work area for tanker loading is equipped with a certified ground, where containers and tank trailers may be grounded.
 - To be effective, bonding and grounding connections should be metal to metal between the containers and the cables. To get a good connection all paint, dirt and rust must be removed from the spots where the cable clamps will be attached.
 - See below for grounding rod illustrations.



Figure 1 - Grounding Rod on South Dock



Figure 2 - Tanker Connected to Grounding Rod



Figure 3 - Container Connected to Grounding Reel

Waste SOP 10 - Mercury Wastes

10.1. Safety – General

10.1.1. The Hazardous Materials contained in Mercury Waste containers can injury, death or environmental damage if not handled properly. See section 10.6.5 of this SOP for additional safety warnings and safe work procedures.

10.2. Waste Description / Qualification

- Mercury Wastes are defined as wastes that may contain elemental mercury, mercury compounds or mercury debris. Mercury wastes are managed with specific processes due to the nature of mercury waste and the specific disposal technologies required. Common Mercury Wastes that are managed at the TSD include:
 - Elemental mercury
 - Laboratory / Industrial chemicals that contain mercury or mercury compounds
 - Thermostats, thermometers and other devices that contain mercury
 - Mercury containing debris from spill cleanup

10.2.1. Mercury Wastes may be received at the TSD as Hazardous Waste or Non-Hazardous (Universal) waste. Mercury wastes may be corrosive and toxic. All Mercury wastes that are qualified for this program must meet the following requirements:

- The waste meets the definition of a Mercury Waste per this procedure
- The waste is properly characterized
- The waste contains chemical constituents and / or waste codes that are not prohibited from management at the TSD
- Each drum has been reviewed and approved for shipment to the TSD

10.2.2. Mercury waste eligible for consolidation are assigned the following process codes in the WMSS:

- Mercury Elemental
- Mercury Compounds
- Mercury Debris

10.3. Quality Control

10.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a Mercury waste per this procedure and the profile
- The waste is properly labeled and identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed

10.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard
- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Inspect the waste for the above QC parameters and record the results of the QC on the QC Form.

10.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

10.4. Receiving

10.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

10.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

10.5. Storage

10.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

10.5.2. Mercury wastes must be stored in Room E or Room F, which are designated as areas acceptable for storage of corrosive / toxic mercury wastes

10.5.3. Class 9 and non-DOT regulated wastes may be stored in any room

10.6. Processing instructions

10.6.1. Packaging / Labeling

- Mercury wastes are consolidated into DOT shipping containers. Each consolidated container must be immediately labeled per RCRA / DOT / TSD requirements and entered into the WMSS inventory for proper tracking.

10.6.2. Processing Method - Consolidation

Consolidating mercury waste has risk of chemical exposure and environmental contamination. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause exposure, injury or illness.

- Segregation of materials will be supervised by a Labpack Chemist. Materials will be segregated based on hazard characteristics, chemical compatibility, liquid or solid, specific TSDF criteria, and DOT requirements.
- After segregation, an inventory will be completed / consolidated on an inventory sheet per drum.
- All the requested information on the lab pack inventory sheet must be filled out completely.
- Packing of the material should begin during or after a lab pack inventory sheet is completed. The appropriate container must be chosen based on hazard class, chemical compatibility, packing group, and special packaging requirements per DOT. For example, corrosive material should not be packed in metal containers based on chemical compatibility.
- Once the proper container has been selected pour compatible absorbent into the bottom of the container as required by DOT, then add materials. Ensure that:
 - All materials stand right side up
 - All containers are completely labeled
 - All containers are completely sealed
 - There is space between glass containers and layers so that compatible absorbent can be poured into the gaps between glass to prevent breakage
 - After all the material is placed into a container, fill with compatible absorbent until the drum is completely filled.
 - The project lead and/or field chemist will assign a drum number to each container and list the drum number on the lab pack inventory sheet accordingly.
 - Leave a carbon copy of the lab pack inventory sheet with the container. All other carbon copies will be given to the Lab Pack Chemist.
 - The following items will be placed on each drum:
 - DOT markings and labels
 - Drum number
 - Lab pack inventory sheet placed on the outside of the container inside the packaging slip (leave the packaging slip open on one side for modifications)

10.6.3. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) to the WMSS after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

10.6.4. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

10.6.5. Processing Safety

- Mercury wastes can be corrosive and toxic. Take care not to accidentally release Labpack waste during handling, which can create injury or environmental hazard.
- ***Note - Every possible effort should be made to ensure that the Labpack Chemist(s) can be clearly seen by at least one other individual in case of an accidental spill/exposure during segregation and processing. ALWAYS LOOK OUT FOR ONE ANOTHER! Safety is our main priority.***
- Many Mercury wastes have poor warning properties in the event of a release or contamination. Never rely on odor as a warning property for Mercury waste, as it has no odor.
- Use care when handling broken thermometers to avoid injection injury
- Consolidation of Mercury wastes may be done inside of the warehouse as there is no intentional handling of open waste containers. In the event of a broken or open container is discovered, the container should be moved to a well-ventilated and contained area for processing. Additional PPE will be necessary. Evaluate the hazard of the potentially released chemical for the appropriate PPE.
- Use care when opening containers during consolidation. Inner containers can be damaged / broken during transportation.
- Level D PPE is normally required for all employees involved in consolidating waste to provide cross contamination protection. In the event of a broken container, the following Level C personal protective equipment is required at a minimum:
 - Air purifying respirator (full face)
 - Disposable apron or Tyvek suit
 - Chemical protective gloves

Waste SOP 11 - Non-Consolidation Wastes (DIDO)

11.1. Safety – General

- 11.1.1. The Hazardous Materials contained in “Drum In, Drum Out” (DIDO) containers can cause injury, death or environmental damage if not handled properly. See section 11.6.3 of this SOP for additional safety warnings and safe work procedures.

11.2. Waste Description / Qualification

DIDO wastes are defined as wastes cannot be consolidated at the TSD, or are not viable for consolidation due to the properties of the material. Common DIDO Wastes that are managed at the TSD include:

- Non-Pumpable Fuels
- Lean waters with high water concentrations
- Waste liquids packaged in small containers (vials, cartridges, devices)
- Wastes that may need additional processing at downstream TSDs
- Wastes that have no current consolidation program, but are not restricted from management at the TSD

- 11.2.1. DIDO Wastes may be received at the TSD as Hazardous Waste or Non-Hazardous waste. All DIDO wastes that are qualified for this program must meet the following requirements:

- The waste meets the definition of an DIDO waste per this procedure
- The waste is properly characterized
- The waste contains chemical constituents and / or waste codes that are not prohibited from management at the TSD
- Each drum has been reviewed and approved for shipment to the TSD

- 11.2.2. DIDO waste eligible for consolidation are assigned the following process codes in the WMSS:

- DO NOT CONSOLIDATE

11.3. Quality Control

11.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a DIDO waste per this procedure and the profile
- The waste is properly labeled and identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed

11.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard

- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Inspect the waste for the above QC parameters and record the results of the QC on the QC Form.

11.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

11.4. Receiving

11.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

11.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

11.5. Storage

11.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

11.5.2. Room B, C and D are designated for flammable and reactive wastes

11.5.3. Room E is designated for corrosive base wastes

11.5.4. Room F is designated for corrosive acid wastes and oxidizing wastes

11.5.5. Toxic, Class 9 and non-DOT regulated wastes may be stored in any room

11.6. Processing instructions

11.6.1. Packaging / Labeling

- Each DIDO waste container must be labeled per RCRA / DOT / TSD requirements and entered into the WMSS inventory for proper tracking. The following labels are required to be on all containers in storage **at all times**:
 - RCRA label or non RCRA label –as applicable
 - DOT Hazard class label – when required
 - TSD inventory label

11.6.2. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container into the storage location using a data acquisition terminal (scanner). This will ensure tracking of the waste to the correct storage location.
- If a container is moved from one location to another, ensure that the new location is entered into the WMSS either by scanner, or manually into the WMSS.

11.6.3. Processing Safety

- DIDO wastes can have any hazard associated with hazardous materials. Handle containers carefully in order to not accidentally release waste during handling, which can create injury or environmental hazard.
- Level D PPE is normally required for all employees involved in handling DIDO waste to provide cross contamination protection. In the event of a release or damaged container, the protective equipment requirements may need to be re-evaluated and upgraded based on the hazard of the waste that is spilled or at risk.

Waste SOP 12 - Solid Fuels

12.1. Safety – General

- 12.1.1. Solid Fuels can cause fire, injury, death or environmental damage if not handled properly. See section 12.6.6 of this SOP for additional safety warnings and safe work procedures.

12.2. Waste Description / Qualification

- 12.2.1. Solid Fuels are defined as a solid material that has fuel value greater than 5000 BTU. Common Solid Fuels that are managed at the TSD include:

- Laboratory or Industrial Solvent wipes
- Empty containers that once held flammable liquids
- Carbon media
- Debris and Production Wastes
- Other organic solids that may have greater than 5000 BTU fuel value.

- 12.2.2. Solid Fuels may be received at the TSD as Hazardous Waste or Non-Hazardous waste. All Solid Fuels that are qualified for this program must have the following properties:

- The waste contains no free liquid
- The waste is organic and/or petroleum based, or is contaminated with organic chemical
- The waste has a minimum of 5000 BTU fuel value as certified by the generator

- 12.2.3. Flammable solids eligible for consolidation are assigned the following process codes in the WMSS:

- Fuels Sol Non-Haz
- Fuels RCRA Solid

12.3. Quality Control

12.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a solid fuel per this procedure and the profile
- The waste is properly labeled and is identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed
- Layers
- Color

12.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard

- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Open the container
- Inspect the waste for the above QC physical parameters and record the results of the QC on the QC Form.

12.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

12.4. Receiving

12.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

12.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

12.5. Storage

12.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

12.5.2. Flammable Solid wastes must be stored in Room C or Room D, which are designated as flammable / organic storage areas.

12.5.3. Class 9 and non-DOT regulated wastes may be stored in any room

12.6. Processing instructions

12.6.1. Processing Location

- Solid Fuels consolidation is allowed at the back dock, south dock, north dock or other location where a receiving container can safely be placed in proximity of the operation.

12.6.2. Packaging / Labeling

- Solid Fuels are consolidated into DOT shipping containers such as cubic yard boxes or roll-off containers. Each consolidated container must be immediately labeled per RCRA / DOT / TSD requirements and entered into the WMSS inventory for proper tracking.

12.6.3. Processing Method - Consolidation

Consolidating flammable waste has risk of fire, explosion or chemical exposure. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause fire, injury or death.

- Solid fuels consolidation must take place in a 24 hour period once consolidation into the receiving container has started. Note the start date / time and finish date / time on the consolidation form.
- The HWC will provide a list of containers identified for consolidation. Only the containers on the list provided are allowed to be consolidated. Additions to the Pick List will require approval by the HWC or Operations Manager after review of the waste profile.
- Stage and prepare the receiving container(s) as needed.
- Stage and prepare the containers designated for consolidation, but leave the container openings closed / covered until consolidation to minimize emissions from the containers.
- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged;
- Don the PPE required in Section 12.6.6
- Open the containers of material to be consolidated;
- Transfer the waste to the receiving container;
 - Solid Fuels may be processed into compaction or shredding systems which will allow the materials to be consolidated into a container for efficient transportation of the waste.
- For shredding and compaction, the material must be transferred to the processing equipment using all applicable ACTreatment SOPs, processing equipment operating instruction, and safety rules to prevent safety health and environmental hazards.
- Repeat steps above until the container is completely loaded with consolidated waste; and
- Note any non-conformances or discrepancies on the Pick List as they arise.

12.6.4. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) to the bulk location after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

12.6.5. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as “EMPTY” and dated then sent for recycling or disposal within one year.

12.6.6. Processing Safety

- Solid Fuel wastes can be flammable and toxic. Take care not to accidentally release solid fuel waste during handling, which can create a fire, injury or environmental hazard.
- ***No spark generating tools or equipment is allowed in the processing area when consolidation is in progress***
- Consolidation of Solid Fuel wastes must be done outside of the warehouse, on the docks to allow for proper ventilation.
- Follow all safety rules for processing equipment when operating.
- Never operate shredding or compaction equipment without all guards and interlocks in place, and never bypass an interlock or guarding device, as it can result in serious injury or death. ***Always follow the SOP for the equipment!***
- Manual handling of solid fuels can cause strains / sprains. Use safe lifting techniques and proper tools to help prevent injuries.
- Many Solid Fuels can be sharp, use tools instead of hands to move waste to the consolidation container.
- Level C PPE is required for all employees involved in consolidating waste to provide cross contamination protection and respiratory protection. The following Level C personal protective equipment is required at a minimum:
 - Air purifying respirator (full face)
 - Disposable apron or Tyvek suit
 - Chemical protective gloves
- Many Solid Fuels can be dusty. Use light water spray from pump sprayers to help minimize dust emissions.

Waste SOP 13 - Waste Oil

13.1. Safety – General

- 13.1.1. Waste Oil and Oily waters can cause injury, death or environmental damage if not handled properly. See section 13.6.5 of this SOP for additional safety warnings and safe work procedures.

13.2. Waste Description / Qualification

- 13.2.1. Waste Oils are defined as a liquid material that contains oil that can be recycled. Common Waste Oils that are managed at the TSD include:

- Used Motor Oils
- Industrial / Commercial lubricants
- Other Automotive products
- Dielectric fluids
- Other oily waste that can be recycled as oil

- 13.2.2. Waste Oils are received at the TSD as Non-Hazardous waste. All Waste Oils that are qualified for this program must have the following properties:

- The waste is liquid
- The waste is oil based, or contains oil based contaminants (oily water)
- The waste is not RCRA regulated as a listed or characteristic hazardous waste

- 13.2.3. Waste Oils eligible for consolidation are assigned the following process codes in the WMSS:

- Recycle Used Oil
- Recycle Oily Water

13.3. Quality Control

13.3.1. QC Parameters

Upon Receipt, waste that is intended for the program is physically checked and evaluation is performed to ensure that the description on the profile is accurate, and that the waste will meet the requirements for the outbound management program. Results are recorded on the Quality Assurance/Quality Control (QA/QC) Report that accompanies the manifest. QA/QC data that is generated upon receipt of the waste includes:

- The waste meet the definition of a Waste Oil per this procedure and the profile
- The waste is properly labeled and is identified
- The container is in acceptable condition, compatible with the waste, has no damage and is properly closed
- pH
- Layers
- Color
- Sludge

13.3.2. QC Steps

- Inspect the container for conditions that could be a safety hazard

- Inspect the container for proper labeling Per RCRA and Department of Transportation Labels as required
- Open the container
- Inspect the waste for the above physical QC parameters using a coliwasa or similar sampling device and Record the results of the QC on the QC Form
- Conduct a chemical analysis as needed (pH, % water) on a representative number of containers using the “cube root” procedure, as described in WAP Section 4.2

13.3.3. Discrepancies

- Note any discrepancies on the QC Form.
- Non-conforming wastes are quarantined until disposition can be determined by notifying the generator.
- Non-conforming waste disposition may include re-routing of the waste to a more appropriate program or rejection of the waste back to the generator.

13.4. Receiving

13.4.1. Physical Receiving of Waste

- Label the waste with the TSD inventory label / barcode for inventory tracking.
- Once the waste has passed QC check, and can be received into the TSD, the waste will be physically received into the warehouse, and the Operating record will be updated to reflect the status and location of the waste.

13.4.2. Operating Record Update

The operating record will be updated with the receiving information that is required for receipt of the waste.

- Weight of the waste
- Disposition of the waste
- Storage location of waste

13.5. Storage

13.5.1. The storage parameters of the waste are determined by the chemical composition of the waste.

13.5.2. Waste Oils may be stored in any of the TSD Rooms.

13.6. Processing instructions

13.6.1. Packaging / Labeling

- Waste Oils are consolidated into shipping containers such as totes or tank trucks. Each consolidated container must be immediately labeled per RCRA / DOT / TSD requirements and entered into the WMSS inventory for proper tracking.

13.6.2. Processing Method - Consolidation

Consolidating waste oil has risk of chemical exposure and other hazards. All employees are required to wear the proper personal protective equipment and follow the required safety procedures when performing consolidations. Failure to do so may cause injury or death.

- The HWC will provide a list of containers identified for consolidation (see appendix A for a sample Pick List). Only the containers on the list provided are allowed to be consolidated. Additions to the Pick List will require approval by the HWC or Operations Manager after review of the waste profile.
- Stage and prepare the receiving container(s) as needed
- Stage and prepare the containers designated for pumping, but leave the container openings closed / covered until pumping to minimize emissions from the containers
- Locate and stage the wastes selected for consolidation on the Pick List. Initial the Pick List when each item is pulled and staged
- Don the PPE required in Section 12.6.5
- Open the containers of material to be consolidated
- Transfer the waste to the consolidation container
- Repeat steps above until the container is completely loaded with consolidated waste and
- Note any non-conformances or discrepancies on the Pick List as they arise

13.6.3. Tracking of Data

Maintaining data is essential for compliance, safety and inventory management efficiency. Failure to adequately track the data associated with the wastes that are handled by the TSD can result in non-compliance, safety hazards and re-work.

- Scan each container using a data acquisition terminal (scanner) to the bulk location after they are transferred to the consolidation container. This will ensure tracking of the waste to the new container.
- Initial that each container was loaded to the receiving container on the Pick List.
- When the container is full, close and secure the container then remove the container from the consolidation area.
- Return the completed Pick List to the HWC to complete the consolidation process in the WMSS.
- Repeat steps above until the container is completely loaded with consolidated waste.
- Note any non-conformances or discrepancies on the Pick List as they arise.

13.6.4. Housekeeping

- Clean-up and contain debris and place clean-up material and sheeting in an open top drum for disposal as Non-Hazardous Waste.
- Empty containers need to be de-faced, labeled as "EMPTY" and dated then sent for recycling or disposal within one year.

13.6.5. Processing Safety

- Waste Oil can be combustible and toxic. Take care not to accidentally release waste oil during handling, which can create injury, environmental hazard or slip hazard.
- ***No spark generating tools or equipment is allowed in the processing area when consolidation is in progress***
- Consolidation of Waste Oil must be done outside of the warehouse, on the south dock to allow for proper ventilation
- Follow all safety rules for processing equipment when operating.

- Manual handling of Waste Oil can cause strains / sprains. Use safe lifting techniques and proper tools to help prevent injuries.
- Level D PPE is required for all employees involved in consolidating waste to provide chemical splash protection and respiratory protection. The following Level D personal protective equipment is required at a minimum:
 - Safety glasses
 - Splash apron
 - Solvent protective gloves

Waste Analysis Program (WAP)

WAP Section 1 - General Requirement of the WAP

- 1.1. ACTreatment will maintain a copy of this Waste Analysis Plan (WAP) at the facility as required by 40CFR§264.139(b)]
- 1.2. As needed, ACTreatment may request, as a Class 1 Permit Modification, changes to test methods contained within this WAP to ensure that test methods are kept current.
- 1.3. ACTreatment will update the required waste analysis to ensure that the information is accurate. 40CFR §264.13(a)(3)]
 - 1.3.1. The update or re-analysis will occur whenever ACTreatment has reason to believe the process or operation generating the waste has changed. 40CFR §264.13(a)(i)]
 - 1.3.2. The update or re-analysis will occur whenever the on-site acceptance inspection indicates that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest. 40CFR §264.13(a)(3)(ii)
 - 1.3.3. At a minimum, the required analysis will be reviewed and/or updated annually. The review will include updating the brief description of the process which generates each waste for each generator sending waste to the facility. Documentation of the review, up-date, and/or re-analysis will be maintained in the operating record. 40CFR §264.13(b)(4), and 40CFR §264.73(b)(3)]
- 1.4. ACTreatment will maintain copies of all waste analysis results as part of the operating record. These records shall be kept until closure of the Facility. 40CFR§264.73(b)] The Facility shall maintain these records during the Post-Closure Period also.
- 1.5. If a discrepancy is found, and cannot be resolved, then no further shipments of the waste stream from that Generator will be accepted at the Facility without repeating formal acceptance review of the waste through the Waste Review procedures.

WAP Section 2 - Waste Documentation, Review and Approval Process

2.1. Waste Profile

The Waste Profile is defined as the accumulated data that is used to perform Waste Analysis at the TSDF. The data that is contained in the Waste Profile will include some or all of the following:

- Waste Profile Form and associated data
- Laboratory analytical data
- Waste inspection and sampling data
- Any other data that may be required for acceptance, management and disposition of the waste

2.1.1. Generator Knowledge

Acceptable process knowledge may be used for the pre-acceptance evaluation. The Operating Record shall contain documentation that demonstrates that the information is current and sufficient to accurately identify the waste.

2.1.2. Analytical Data

Analytical data required for the Waste Review may either be provided by the generator or by Advanced Chemical Treatment (ACTreatment). ACTreatment will perform verification analysis if the facility has reason to believe that the analytical data provided by the generator is inadequate.

When analytical data provided by the generator is used to comply with the analytical requirements of the Waste Review process, on-site analytical methods and quality control and quality assurance (QC/QA) will be used to evaluate the acceptability of that data.

2.1.3. Waste Profile Form

The waste characterization data that is necessary to perform the Waste Review will be recorded on a Waste Profile Form and confirmed by the signature of an authorized representative of the generator. The generator is responsible for the hazardous waste determination per 40 CFR §262.11 and the Waste Profile Sheet will document this determination.

2.1.4. Waste Profile Data

- Each waste stream will be assigned a unique identification number that is provided by ACT.
- Generator Identification Information (Section A of current profile form)
- The key waste stream identification data provided by the generator representative will include:
 - Generator EPA Identification number (when applicable)
 - Generator name, contact information and applicable address(es)
 - Generator contact person name and title
 - Name of the waste stream
 - A description of the process that is generating the waste
 - Applicable EPA Source and Form code
 - NAICS code
- The generator representative will provide the following Physical Characteristics information Physical Characteristics of the Waste (Section B of current profile form)
 - Physical state
 - Color
 - Clarity
 - Phase Separation and Number of Layers (when applicable)
 - Odor
 - pH
 - Specific Gravity
 - Flash Point

- BTU Value
- The generator representative will provide the following Chemical Characteristics information (Sections C, D, E of the current profile form):
 - The Chemical Composition of the waste
 - RCRA regulated metals information
 - Other Components and Characteristics
 - Whether the chemical composition information based on Generator Knowledge or Laboratory Analysis?
- Regulatory Information (RCRA Codes, NESHAP, TSCA, Universal, etc.[currently resides in section F])
 - Applicable regulated characteristics and RCRA Waste Codes
- Shipping and Generation Information (Section F)
 - Department of Transportation Shipping Information
 - Shipping container information
 - Shipping frequency information
- Special Handling Information
 - Any special handling information that may have an impact on safe handling and disposal of the waste
- Generator Certification

The Generator representative will certify that:

"I hereby certify that all information in this and all the attached documents is complete and accurate, and that all known or suspected hazards have been disclosed. I further certify that any samples submitted with this profile are representative of the waste to be shipped and are taken in accordance with SW 846 or other approved procedures. I agree to notify Advanced Chemical Treatment in writing when the process generating this waste stream changes or when I have reason to believe the data contained herein is not complete and accurate."

2.2. Waste Review

Following completion and submittal of the Waste Profile form, the waste will be evaluated for management at the facility. This evaluation will ensure that receipt of the waste material will be in compliance with this Permit, and all applicable laws and regulations. This review will also ensure that the waste material can be adequately managed by the facility's treatment, storage and disposal capabilities and that the waste will be compatible with other wastes with which it will come into contact during consolidation, and with each container's construction materials that the waste will be placed in. This evaluation will include the following:

- Documentation of the waste stream
- Physical and Chemical Characteristics Review
- Permit compliance of the waste and proposed management
- Customer Requirements and special requests

- Management Capability including prohibitions, storage requirements, processing requirements, QA / QC requirements and Process Code assignment
- Downstream disposition of the waste and acceptance requirements
- Transportation Requirements
- Packaging Requirements
- Management of By-Products

Documentation of this evaluation shall be maintained in the Operating Record.

2.3. Waste Profile Acceptance

ACTreatment will use the Waste Review process to evaluate the acceptability of the waste into the TSD. Approval of the waste will be acknowledged by the General Manager or his designee.

2.3.1. Documentation of Approval

- Approval of the waste stream will be documented in the Operating Record. An approved waste profile has a status designation of "A" in the operating record.
- Each waste stream approval will be valid for one year after approval into the TSD.
- Any waste profile that is expired or nearing expiration may be accepted by Re-Certification with a signature on the profile form by the generator of the waste, provided that no changes to the waste stream have occurred.
- If there are changes to the waste stream, a new profile must be submitted, reviewed and approved.

2.3.2. Unacceptable Waste Streams

If a waste stream is not acceptable, the generator will be notified of the un-acceptability and the reasons for the un-acceptability.

2.3.3. Record Retention

Waste profile information and signed waste profile forms will be filed electronically at ACTreatment within the operating record according to Federal and State record retention requirements and per the record retention requirements in ACTreatment procedure.

WAP Section 3 - Physical Acceptance of Waste

3.1. Document Verification

The following procedures will be used to verify that each waste stream shipment has the appropriate documentation for acceptance.

3.1.1. Manifest

- A manifest will accompany each hazardous waste shipment (except universal waste shipments).
- The generator and transporter portions of the manifest shall be reviewed for completeness, date, and signature

3.1.2. LDR

- Waste shipment and pre-acceptance approval information that determine if the waste stream is subject to LDRs will be reviewed

- A verification will be made that the Waste Profile and the LDR notification are current for the waste shipment
- Other Shipping Documents: All other shipping documents will be reviewed

3.1.3. Identification of Discrepancies

The following items will be considered significant discrepancies in the document verification process:

- The weight of a bulk shipment varies with the weight indicated on the accompanying manifest by more than 10 percent
- The piece count of a shipment varies with the piece count indicated on the accompanying manifest
- Variations in the type of waste or waste constituents indicated on the accompanying manifest
- The information contained in the generator or transporter portions of the manifest is incomplete or inconsistent with that expected based on the information contained on the Waste Profile;
- The generator and transporter portion of the manifest is unsigned or not dated;
- A Waste Profile is not on file for the waste stream
- The notification/certification required for a waste subject to LDR has not been submitted or the notification/certification is incomplete.

If any of the discrepancies listed above are identified, the shipment will not be processed or disposed of until the discrepancy is resolved. Wastes may be stored (provided that the wastes meet the requirements for storage) while the discrepancy is resolved. These wastes must be segregated.

3.1.4. Resolution and Documentation of Discrepancies

Discrepancies which are resolved shall be recorded in the operating record with a concise explanation of how the discrepancy was resolved to allow acceptance of the waste.

If the discrepancy is not resolved within 15 days after receiving the waste, ACTreatment must immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

If no resolution is possible, the shipment will be returned to the generator.

WAP Section 4 - Inspection and Sampling of Waste

Chemical sampling, analysis and evaluation is a critical part of maintaining compliance to regulation and the facility permit for proper management of hazardous waste. This procedure describes the steps and processes required to perform waste sampling, analysis and evaluation.

4.1. Physical Inspection Requirements

Site personnel will consult the QC form and other applicable waste characterization data to identify proper personal protective equipment for shipment inspection and sampling.

Using appropriate personal protective equipment, site personnel will inspect the contents of the shipment for visual conformity with the waste described on the hazardous waste manifest. The contents of every selected container per section 4.2 of this document will be visually inspected for color and appearance as described in the waste-category SOPs above.

4.2. Selection of Containers for Physical or Chemical Evaluation and Analysis

As described above in waste-category SOPs, where chemical analysis is required for liquid wastes (i.e. pH, water content), representative samples will be obtained from each shipment of a given waste profile. The minimum number of containers to be sampled from each shipment of a waste stream will be determined according to the cube root procedure, Method D 140-70 of the American Society for Testing and Materials (ASTM). That method states that the number of drums to be randomly selected for sampling should equal the cube root of the total number in the shipment, as follows:

# Drums Received	# Drums Sampled
1	1
2 – 8	2
9 – 27	3
28 – 64	4
65 - 225	5

The hazardous waste containers to be sampled will be chosen at random by the person taking the samples. The sampling will take place in a well-ventilated area of the Facility, such as the dock, and samples will be collected as described in the Waste Analysis Program (WAP), below.

4.3. Chemical and Physical Evaluation and Analysis Descriptions

The following physical analyses and/or evaluations may be performed at ACTreatment as identified in the waste category SOPs:

Parameter	Method	Rationale	EPA Method
Container	Visual	<ul style="list-style-type: none"> • Container compatibility with the waste • Condition will not create a safety hazard • Properly closed 	N/A
Color	Visual	<ul style="list-style-type: none"> • waste confirmation / identification 	N/A
Appearance	Visual	<ul style="list-style-type: none"> • waste confirmation / identification 	N/A
Layers	Visual	<ul style="list-style-type: none"> • waste confirmation / identification • management method confirmation • processing methods 	N/A
Sludge	Resistance	<ul style="list-style-type: none"> • waste confirmation / identification • management method confirmation • processing methods 	N/A

The following chemical analyses and/or evaluations may be performed at ACTreatment as identified in the waste category SOPs:

Parameter	Method	Rationale	EPA Method
pH	Wide Range pH Analysis by indicator strip	<ul style="list-style-type: none"> • waste confirmation / identification • management method confirmation • processing methods • hazard identification 	9041
% Water	Karl Fischer Titration	<ul style="list-style-type: none"> • waste confirmation / identification • management method confirmation • processing methods • hazard identification 	9000
British Thermal Units (BTU)	Calorimetry	<ul style="list-style-type: none"> • waste confirmation / identification • management method confirmation • processing methods 	
Chlorine	Test Strip	<ul style="list-style-type: none"> • waste confirmation / identification • management method confirmation • processing methods • hazard identification 	N/A
Oxidizer	Test Strip	<ul style="list-style-type: none"> • waste confirmation / identification • hazard identification 	N/A

4.4. Chemical Analysis Methods

4.4.1. Wide Range pH Analysis

1. Log the sample number in the sample log.
2. Using Hydrion Plastic pH Indicator Strips 0.0 – 14.0 (or equivalent), immerse the colored tip of the pH strip in the test solution.
3. Remove the strip and immediately match to the color chart on the pH strip container.
4. The color match will indicate the wide range pH of the sample.
5. Record the pH on the sample log.

4.4.2. Karl Fischer Titration

1. Log the sample number in the sampling log.
2. Shake the sample vigorously for at least 30 seconds.
3. Open the sample bottle and insert the transfer pipette. Always use a new disposable pipette for each sample to prevent cross-contamination of samples.
4. Squeeze the pipette bulb, insert the tip of the pipette into the fluid and release the bulb to draw fluid into the pipette.
5. Hold the pipette with the bulb down and tip pointed up. Tap the bulb of the pipette to allow the sample to fall down into the bulb.
6. Place the pipette into the cup on the titration scale with the bulb down, to prevent spillage and close the wind break on the scale.

7. Press start on the KF Titration unit or on the attached keyboard. This will begin the sample conditioning process in the titration reaction vessel on the KF titration apparatus. The KF titration unit will chime when the reaction fluid is conditioned.
8. Press start on the KF Titration unit or the attached keyboard again to move to the sample analysis process.
9. The KF Titration unit will ask for a sample number. Type the sample number (d-number) and verify the sample number is correct before proceeding to the next step. If you make a mistake, use the delete key on the keyboard to back up the cursor to correct mistakes. After verification that the sample number is correct, press the enter key on the keyboard to move to the next step.
10. Remove the white stopper from the top of the reaction vessel. Make sure to keep the stopper clean and dry.
11. Remove the pipette from the scale and agitate the fluid in the bulb of the pipette by gently shaking or flicking the pipette bulb.
12. While gently squeezing the bulb and watching for fluid to reach the tip of the pipette, allow one or two drops of fluid to fall into the reaction vessel of the KF Titration unit.
13. Return the sample to the scale and replace the stopper on the KF Titration reaction vessel.
14. Allow the scale to re-balance and determine the weight of the drops that were placed into the reaction vessel. An accurate weight of sample introduced into the vessel is critical for accurate results.
15. Enter the weight of the sample into the KF Titration unit and press Enter to start the titration process. Once the titration is complete, it will print the results on the printer and will also display the results on the screen of the KF Titration Unit.
16. Remove the sample pipette and squeeze the remaining sample back into the original sample jar. Discard the pipette into the appropriate waste container.
17. Repeat the steps above for multiple samples.

Notes:

- Calibrate the scale daily following the calibration instructions in the scale manual
- Check the accuracy KF Titration Unit daily by performing the above steps on a sample of known quantity of water (10% water in solvent)
- The sample run time is affected by the quantity of sample introduced into the reaction vessel. Use only one or two drops.
- Record the test results on the sample log.

4.4.3. Calorimetry

Calorimetry is not performed at this time. In the future, if calorimetry is performed, the unit will be operated per manufacturer instructions.

4.4.4. Chlorine Test Strips

1. Log the sample number in the sample log.
2. Using LaMotte Chlorine Test Papers (Code 4250-BJ), immerse one inch of the test strip into the test solution and remove immediately.
3. Blot the strip with a paper towel and allow drying.
4. Compare the color of the strip to the color chart on the test strip container.
5. Record the test results on the sample log.

4.4.5. Oxidizer Test Strips

Oxidizer test strips are not used at this time. In the future, if oxidizer test strips are used, they will be used according to manufacturer instructions.

4.4.6. Resolution and Documentation of Discrepancies

If any discrepancies (as described below) are identified, the shipment will not be processed or disposed at the facility until the discrepancy is resolved. Wastes may be stored (provided that the wastes meet the requirements for storage) while the discrepancy is resolved. These wastes must be segregated.

- Discrepancies which are resolved shall be recorded in the Operating Record with a concise explanation of how the discrepancy was resolved to allow acceptance of the waste.
- If the discrepancy is not resolved within 15 days after receiving the waste, ACTreatment will immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
- If no resolution is possible, the shipment will be returned to the generator.

4.5. Waste Acceptance

If no discrepancies are identified, or following the resolution of any discrepancies, the following procedures will be used to accept waste shipments:

- The Waste Coordinator will note the Management Method Codes in section 19 of the manifest.
- Acknowledgement of Receipt will be carried out by the Waste Coordinator, by signing the manifest as the designated facility in section 20 of the Manifest.

4.5.1. Record Retention

Waste Acceptance information will be filed electronically at ACTreatment within the operating record according to Federal and State record retention requirements and per the record retention requirements in ACTreatment procedure

WAP Section 5 - Waste Processing

5.1. Identification and Selection of Management Processes (Each MP Documented by SOP)

Management Processes are designated during the waste review process based on waste chemical and physical composition, customer management requirements and downstream TSD requirements. Management Processes are defined by procedures that include specific instruction on management of the waste through the TSD.

- Review of Processing Requirements - Each Management Process is reviewed prior to execution to ensure that the correct steps will be followed for management of the waste and to eliminate miss-processing of wastes.
- Selection of Wastes for processing - Wastes for processing are selected by the TSD process codes that are assigned during the waste review process.

- Pre Processing Inspection - The waste is inspected prior to processing to ensure that the waste conforms to the process code and is uniform with the downstream TSD requirements for proper disposal.
- Execution of Process - The waste is processed per the Management Process documented by the appropriate SOP.
- Post Processing Inspection - The waste is inspected post processing to ensure that it conforms to the waste profile at the downstream TSD.
- Post Processing Sampling (when required) - When required, the waste will be sampled and analyzed per downstream TSD requirements.

5.2. Documentation of Process

The management processes are documented in the operating record which is designed to track consolidation and processing for individual containers as well as consolidated wastes. Each individual drum is tracked to its destination whether it is individually handled wastes or consolidated containers.

5.3. Record Retention

Waste Processing information will be filed electronically or by hard copy at ACTreatment within the operating record according to Federal and State record retention requirements and per the record retention requirements in ACTreatment procedure

WAP Section 6 - Waste Shipment

During the waste shipment process, the following steps will be taken to ensure that the waste will be transported and disposed of as required by the permit, customer requirements and downstream TSD requirements. Steps to ensure acceptability at the downstream TSD include review of:

- Downstream Profile Review
- Transportation Requirements
- Packaging Requirements
- Acceptance Criteria at Downstream Facilities
- Record Retention

Waste Shipment information will be filed electronically or by hard copy at ACTreatment within the operating record according to Federal and State record retention requirements and per the record retention requirements in ACTreatment procedure

WAP Section 7 - Waste Sample Collection Methods

An important consideration in the development of a waste-specific characterization program is the methodologies employed with waste sampling. It is imperative that the sample be as representative of the waste stream as possible, since the reliability of all subsequent analytical and evaluation efforts will be limited by this factor. Procedures and general guidelines for obtaining representative samples of wastes from drums, bulk loads, tanks, and impoundments are discussed in the following sections.

A Sampling Log will be used as a tool by the analyst to document the waste sampling activities. The Sample Log shall be maintained as part of the Operating Record.

Sampling devices are schematically illustrated in SW-846.

Prior to taking a sample, the Waste Profile will be reviewed and safety procedures will be implemented.

7.1. Drum Sampling

Drums or other approved waste containers are likely to contain materials of varying in form and consistency, such as liquids, sludge, or dry solids, all generated either separately and/or in mixtures. The sampling methodologies employed will generally depend upon the specific form and type of waste contained in a drum. Sampling must be representative of the material in the drums and account for any layering or stratification that may occur for any wastes having various liquid/liquid or liquid/solid phases. Containers will be sampled in such a manner as to obtain a vertical profile of the material, unless the physical properties prohibit penetration of the sampling devices.

7.1.1. Sampling Liquids in Drums:

- Liquids will be sampled using a clean glass or plastic "thief", coliwasa or similar sampling device.
- Sludge in drums range in consistency from slurries to near-solid materials. The sampling device employed will be dependent upon the consistency of the sludge material. Loose slurry material will be sampled using a thief, coliwasa or similar sampling device. A material which will not enter these samplers will need to be sampled by other means or the drum will be managed off spec as solid where sampling will not be required.

7.2. Sampling of Tanks

7.2.1. Bulk Flammable Waste Storage Tanks

The contents of the contaminated water storage tanks will typically be sampled from sample valves. Alternatively, samples may be taken from the top of the tanks using a thief, Coliwasa, weighted bottle, or sampling bailer.

7.3. Bulk Tankers

Each tanker will be sampled via the manhole entrance port on the top of the tankers or through a sampling valve located on the bottom-rear of the tanker.

- 7.3.1. The tanker contents will be sampled using a pond sampler or dipper. If necessary, a weighted bottle or equivalent sampling device will be utilized.
- 7.3.2. In the process of collecting a sample from the sample valve, one to two gallons of the liquid will first be permitted to flow through the valve and properly disposed of before collecting the representative sample. This is done to ensure the valve orifice is free of particulates and/or contaminants that may have accumulated during transportation. This procedure also applies to oil/solvent wastes containing variable concentrations of settleable/suspended solids.

7.4. Decontamination of Sampling Equipment

When practical, disposable sampling equipment will be used and disposed of in the same container from which the sample was taken. All reusable equipment will be

washed, rinsed, and visually inspected for residues prior to the reuse of such equipment.

WAP Section 8 - Discrepancy Criteria For On-Site Waste Acceptance Evaluation

The criteria itemized below define respective discrepancies with regard to a comparison of analytical data from either Department requested sampling and/or on-site analysis with the information listed on a Waste Profile.

1. Any determination which identifies or characterizes the material as:
 - Pyrophoric/air reactive
 - Explosive
 - Shock Sensitive
 - Radioactive, exhibiting a radiation reading greater than the limits in Part II.C.6. of this Permit
 - Infectious Wastes
 - Compressed Gas
2. Any analytical result which leads to a change of characterization for the following parameters:
 - Reaction with change in pH resulting in release of gas
 - Ignitability
 - Corrosivity
 - Free Liquids
3. Any analytical result which deviates from the values specified on the Waste Profile by an amount or percentage greater than the limits set below will be considered a discrepancy.
 - pH > 2.0 units (negative log of Hydrogen ion concentration difference) for corrosive wastes
 - Total water content greater than 40% for organic liquids intended to be consolidated for fuel blending
4. Any distinctly different characteristic for each of the following parameters:
 - Color
 - Number of Phases
 - Physical State
 - Volume percent sediment, aqueous liquid and organic liquid having a difference in excess of twenty-five percent (25 %)
 - Significant difference in Odor